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TO: Jeffrey E Russel
Location: CM1/11D13/9B07
Art Unit: 1654
July 8, 2003

Case Serial Number: 018806

From: P. Sheppard
Location: CM1-1E03
Phone: (703) 308-4499

sheppard@uspto.gov

Search Notes

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Search and Information Resources Administration

Access DB# _____

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jeffrey E. Russel Examiner #: 62705 Date: 7-7-2003
Art Unit: 1654 Phone Number 308-3975 Serial Number: 10/018,806
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL
CM1-11D13/CM1-9807

If more than one search is submitted, please prioritize searches in order of need.

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Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

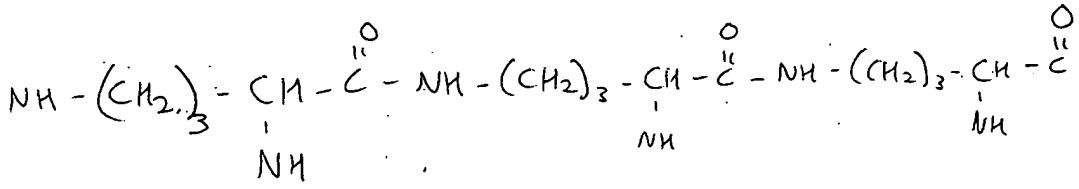
Title of Invention: Method of Preparing Polycation Based Bioconjugates Suitable For

Inventors (please provide full names): P. Szego

Earliest Priority Filing Date: 5-7-2002

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

Please search the following partial structure:



Please use the keywords conjugat?, complex?, bioconjugat?, DNA, RNA, nucleic, fatty acid, acylat?, succinic, palmit?, ~~stear?, laur?~~ stearic, stearate, lauric, laurate, to narrow any hits.

If possible, please find the RN for the above compound (also called isopolyornithine) and use that for a similar search with the keywords.

Thank you. JER

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: Point of Contact P. Sheppard Telephone number: (703) 308-4499	NA Sequence (#) _____	STN _____
Searcher Phone #:	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) _____	Questel/Orbit: _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr. Links _____
Date Completed: 7/8/03	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: _____	Fulltext _____	Sequence Systems _____
Clerical Prep Time: _____	Patent Family _____	WWW/Internet _____
Online Time: _____	Other _____	Other (specify) _____

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FILE LAST UPDATED: 7 Jul 2003  (20030707/ED)

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.


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L1                STR
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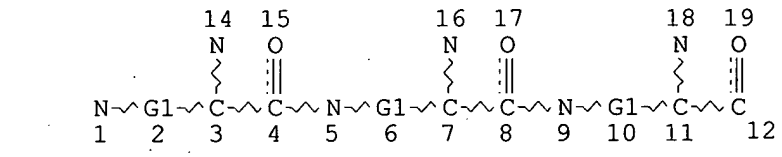


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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  18

STEREO ATTRIBUTES: NONE
L2            51 SEA FILE=REGISTRY SSS FUL L1
L3            24 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2


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L3   ANSWER 1 OF 24  HCAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:539699  HCAPLUS
DOCUMENT NUMBER:          137:103865
TITLE:                    Peptide conjugates, pharmaceutical compositions, and
                          methods for treatment of bacteremia and/or septicemia
INVENTOR(S):              Ofek, Itzhak; Fridkin, Matityahu; Tsubery, Haim
PATENT ASSIGNEE(S):       Ramot University Authority for Applied Research &
                          Industrial Development Ltd., Israel; Yeda Research and
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Development Co., Ltd.
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002055543	A2	20020718	WO 2002-IL38	20020116
WO 2002055543	A3	20030206		

W: AE, AG, AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, CZ, DE, DE, DK, DK, DM, DZ, EC, EE, EE, ES, FI, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2001-261212P P 20010116
OTHER SOURCE(S): MARPAT 137:103865

AB The invention provides conjugates of bacterial outer membrane binding peptides, preferably having bacterial sensitization activity, and immune cell chemotactic peptides, and pharmaceutical compns. contg. them, which are useful in the treatment of bacteremia and/or septicemia following infection by Gram-neg. bacteria, administered alone or in combination with conventional antibiotics.

IT **442878-14-0D**, peptide-contg.
RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(peptide conjugates, pharmaceutical compns., and methods for treatment of bacteremia and/or septicemia)

L3 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:896749 HCAPLUS
DOCUMENT NUMBER: 136:200464
TITLE: Epimerization of peptide nucleic acids analogs during solid-phase synthesis: optimization of the coupling conditions for increasing the optical purity
AUTHOR(S): Corradini, Roberto; Sforza, Stefano; Dossena, Arnaldo; Palla, Gerardo; Rocchi, Raniero; Filira, Ferdinando; Nastri, Flavia; Marchelli, Rosangela
CORPORATE SOURCE: Dipartimento di Chimica Organica e Industriale, University of Parma, Parma, I-43100, Italy
SOURCE: Journal of the Chemical Society, Perkin Transactions 1 (2001), (20), 2690-2696
CODEN: JCSPCE; ISSN: 1472-7781
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Peptide nucleic acid (PNA) analogs based on N.alpha.-(thymin-1-ylacetyl)ornithine were previously shown to form triplexes with complementary RNA. In order to obtain optically pure compds. for hybridization expts., chiral monomers based on D- or L-ornithine, N.delta.-Fmoc-N.alpha.-(thymin-1-ylacetyl)ornithine 2 and N.delta.-Fmoc-N.alpha.-(uracil-1-ylacetyl)ornithine 3 were synthesized either by a one-step or by a simple three-step procedure starting from N.delta.-protected ornithine; the latter procedure led to enantiomerically pure products. Oligomerization of 2 and 3 was carried out either in soln., or by solid-phase peptide synthesis (SPPS) on an MBHA-Rink amide

resin. The oligomers turned out to contain large amts. of epimerization products, esp. those obtained by SPPS. Therefore, we examd. carefully the parameters which may be involved in epimerization: the nature of the coupling reagent, of the base, and the addn. mode. Coupling of the monomer L-3 was performed under various conditions. Lower racemization was found to occur when using (7-azabenzotriazol-1-yl)-1,1,3,3-tetramethyluronium hexafluorophosphate (HATU) as coupling agent and 2,4,6-trimethylpyridine (sym-collidine, TMP) as base, without preactivation, leading to a residual 4% of the D-enantiomer. By applying a procedure based on the stepwise addn. of the base the D-enantiomer content was reduced to less than 1%. Using this procedure, a decamer of L-3 was synthesized, which was shown to contain less than 2% of the D-ornithine deriv.

IT **400747-81-1P 400747-88-8P 400747-94-6P**
400748-06-3P 400748-12-1P 400748-18-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of ornithine PNAs with redn. of epimerization by optimization of the coupling conditions)

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:408818 HCAPLUS
DOCUMENT NUMBER: 135:180940
TITLE: Synthesis of polycationic peptide analog of oligodeoxythymidylic acid
AUTHOR(S): Kwan, Chul Khyun
CORPORATE SOURCE: Kafedra Khim. Prir. Soedinenii, Mosk. Gos. Univ., Moscow, Russia
SOURCE: Vestnik Moskovskogo Universiteta, Seriya 2: Khimiya (2001), 42(2), 128-130
CODEN: VMUKA5; ISSN: 0579-9384
PUBLISHER: Izdatel'stvo Moskovskogo Universiteta
DOCUMENT TYPE: Journal
LANGUAGE: Russian
OTHER SOURCE(S): CASREACT 135:180940

AB A synthesis of new polycationic peptide analog of oligodeoxythymidylic acid on the base of D-ornithine dodecamer, namely 5-N-(L-phenylalanyl)-deca-5-N-[2'-N-(thyminyl-1-alanyl)-L-ornithyl]-L-alanine was developed.

IT **354821-33-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid phase synthesis of polycationic peptide analog of oligodeoxythymidylic acid)

L3 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:258582 HCAPLUS
DOCUMENT NUMBER: 133:89771
TITLE: Olefinic peptide nucleic acids (OPAs): new aspects of the molecular recognition of DNA by PNA
AUTHOR(S): Schutz, Rolf; Cantin, Michel; Roberts, Christopher; Greiner, Beate; Uhlmann, Eugen; Leumann, Christian
CORPORATE SOURCE: Department of Chemistry and Biochemistry, University of Bern, Bern, 3012, Switz.
SOURCE: Angewandte Chemie, International Edition (2000), 39(7), 1250-1253
CODEN: ACIEF5; ISSN: 1433-7851
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
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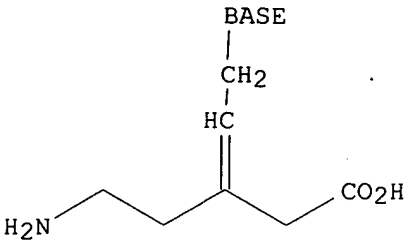


I

AB In order to study the structural and electrostatic effect of the PNA rotameric forms, the authors have synthesized olefinic polyamide nucleic acids (OPAs) in which the central amide functionality was replaced by an isostructural, configurationally stable C-C double bond in either the Z or E configuration (I; BASE = thymidine or adenine), and used them to prep. (E)- or (Z)-OPA oligomers. A series of mono-substituted PNAs and fully-modified (E) and (Z)-OPAs were synthesized and their duplex-forming behavior with DNA studied. Both (E)- and (Z)-OPAs bound to complementary DNA with similar affinities as DNA itself, but in contrast to PNA, OPA2/DNA triplexes were not formed, and OPA preferentially bound in the parallel mode to DNA. Results led to the conclusion that amide functionality in the base-linked unit in PNA detd. significantly the affinity and preferred strand orientation in PNA/DNA duplexes, and seemed to be responsible for the propensity to form PNA2/DNA triplexes; these properties do not depend on the conformational constraints that the amide functionality exerts on the base-linker unit, but rather on its electrostatic properties.

IT **178036-67-4P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and characteristics of olefinic peptide nucleic acids as PNA analogs for mol. recognition of DNA)

REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:209948 HCAPLUS
DOCUMENT NUMBER: 132:255952
TITLE: Cationic dendrimers and their use as macromolecular carriers
INVENTOR(S): Florence, Alexander T.; Wilderspin, Andrew F.; Toth, Istvan; Sakthivel, Thiagarajan; Bayele, Henry K.
PATENT ASSIGNEE(S): School of Pharmacy, University of London, UK
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000016807	A1	20000330	WO 1999-GB3189	19990923
W: GB, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1115428	A1	20010718	EP 1999-947667	19990923
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002526456	T2	20020820	JP 2000-573768	19990923

PRIORITY APPLN. INFO.: EP 1998-307712 A 19980923
GB 1999-21478 A 19990910
WO 1999-GB3189 W 19990923

AB Dendrimers comprising a dendritic polypeptide with one dendron having terminal cationic groups and a lipid anchor, preferably comprising C6-24-alkyl group contg. .alpha.-amino acyl groups, preferably joined to the focal group, are used to assist transfection of cells in vitro and in vivo by DNA. The complex of dendrimer and DNA may be used in gene therapy, for instance to delivery clotting factor genes to cells.

IT **261167-30-0DP**, derivs. **261167-31-1DP**, derivs. **261167-33-3P**
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PNU (Preparation, unclassified); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(cationic dendrimers and their use as macromol. carriers)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:653455 HCAPLUS
DOCUMENT NUMBER: 132:227244
TITLE: Novel cationic lipid peptide dendrimer vectors. In vitro gene delivery
AUTHOR(S): Toth, I.; Sakthivel, T.; Wilderspin, A. F.; Bayele, H.; O'Donnell, M.; Perry, D. J.; Pasi, K. J.; Lee, C. A.; Florence, A. T.
CORPORATE SOURCE: Department of Pharmaceutical and Biological Chemistry, The School of Pharmacy, University of London, London, WC 1N 1AX, UK
SOURCE: S.T.P. Pharma Sciences (1999), 9(1), 93-99
CODEN: STSSE5; ISSN: 1157-1489
PUBLISHER: Editions de Sante
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Cationic lipid dendrimers with a well-defined diam. and a precise no. of terminal amines (8-32 groups) were synthesized using a solid support. The application of dendrimers with widely varied geometries in gene delivery has been studied by estg. transfection efficiency of members of the series, with variable branch length, position of attachment of lipid, the presence of a sugar unit and presence of a nuclear localization signal peptide. The transfection activity of the products was assayed in vitro on Cos-7 (fibroblast) cells. Two dendrimers displayed high transfection activities. Results indicated that the presence of more amino groups on the surface of the dendrimers could enhance gene delivery. A primary physicochem. characterization of the DNA/lipid complexes demonstrated the min. amt. of dendrimer required for the transfection of 2.5 .mu.g plasmid (10 .mu.g/mL for the dendrimers with eight free amino terminals and 5 and 2.5 .mu.g/mL for the dendrimers with 16 and 32 free amino terminals, resp.).

IT **261167-30-0P 261167-31-1P 261167-32-2P 261167-33-3P**
RL: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(cationic lipid peptide dendrimer vectors for in vitro gene delivery)

REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:500245 HCAPLUS
DOCUMENT NUMBER: 131:235657
TITLE: Accelerated optical holographic recording using

bis-DNO
AUTHOR(S): Rasmussen, Palle H.; Ramanujam, P. S.; Hvilsted, Soren; Berg, Rolf H.
CORPORATE SOURCE: Riso National Laboratory, Roskilde, DK-4000, Den.
SOURCE: Tetrahedron Letters (1999), 40(32), 5953-5956
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The design, synthesis and optical holog. recording properties of bis-DNO are reported. Bis-DNO is composed of two identical azobenzene oligoornithine segments (DNO) connected via a dipeptide linker. The two segments were assembled in a parallel fashion at the two amino groups of the dipeptide linker by Merrifield synthesis. Surprisingly, the response time of films of bis-DNOs was found to be much faster than that of their linear counterparts.
IT **244061-02-7**
RL: TEM (Technical or engineered material use); USES (Uses)
(accelerated optical holog. recording using bis-DNO composed of two identical azobenzene oligoornithine segments (DNO) connected via dipeptide linker)
REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:469771 HCAPLUS
DOCUMENT NUMBER: 131:257847
TITLE: Pseudopeptide structures for reversible holographic storage and combinatorial applications
AUTHOR(S): Rasmussen, Palle H.
CORPORATE SOURCE: Riso National Laboratory, Roskilde, Den.
SOURCE: Risoe National Laboratory, [Report] Risoe-R (1999), Risoe-R-1124, i-vii, 1-154
CODEN: RNLRDF; ISSN: 0106-2840
DOCUMENT TYPE: Report
LANGUAGE: English
AB This PhD thesis is divided in two sep. parts. Part 1 deals with design and synthesis of new peptide-based structures for holog. data storage. It has previously been shown that holograms can be recorded in oligomers (DNO; diamino acid N.alpha.-substituted oligopeptides) consisting of peptide-like backbones with azobenzene side chains. The holograms recorded in the original DNO had a no. of favorable properties such as high diffraction efficiency and high resoln. They could be recorded, read, and erased with light, and they had an excellent thermal stability. However, the original DNO also had some serious shortcomings with respect to response time and soly. By performing rational modifications in the mol. geometry, a new generation of DNO has been developed, and these are improved by more than a factor 350 when compared to the original DNO dimer. Furthermore, the new DNOs are sol. in common org. solvents and can be assembled by soln.-phase synthesis, which is mandatory for large-scale fabrication. The new generation of DNO has maintained all of the good properties, e.g., retained reversibility, stability, resoln., and the high diffraction efficiency, of the original DNOs. Part 2 describes the synthesis of new functionalized C3 sym. scaffolds with nanoscale dimensions. The cyclic scaffolds are synthesized in soln. from unnatural amino acids. The structures are intended to serve as core mols. for soln. phase combinatorial chem., and as templates for synthetic receptors. The combinatorial soln.-phase approach (or, the activated core approach) for the synthesis of libraries generally has a limitation due to lack of addressability on the functional groups in the core. This impedes the deconvolution of the libraries and the subsequent synthesis of specific target mols. The lack of addressability has been overcome for the new scaffolds in the synthesis of platforms with selectively removable

protecting groups on their side chains. The platforms were synthesized on a gram scale and their use as core mols. for combinatorial chem. was demonstrated.

IT **184633-50-9 184633-51-0 244785-37-3**
RL: PRP (Properties)
(prepn. of azobenzene-contg. pseudopeptide oligomers, DNO, for reversible holog. storage)

IT **244785-43-1P 244785-44-2P 244785-45-3P**
244785-46-4P 244785-58-8P 244785-60-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of azobenzene-contg. pseudopeptide oligomers, DNO, for reversible holog. storage)

REFERENCE COUNT: 87 THERE ARE 87 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:192812 HCAPLUS
DOCUMENT NUMBER: 129:16363
TITLE: Synthesis of chirally pure ornithine based PNA analogs
AUTHOR(S): Van der Laan, Alexander C.; Van Amsterdam, Irene; Tesser, Godefridus I.; Van Boom, Jacques H.; Kuyl-Yeheskiely, Esther
CORPORATE SOURCE: Leiden Inst. Chem., Leiden Univ., Leiden, 2300 RA, Neth.
SOURCE: Nucleosides & Nucleotides (1998), 17(1-3), 219-231
CODEN: NUNUD5; ISSN: 0732-8311
PUBLISHER: Marcel Dekker, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A stereoselective synthesis of a chiral PNA analog contg. an ornithine based backbone is described. In this approach each elongation cycle consists of two individual coupling steps: i.e. extension of the free .delta.-amino function in the growing chain by a TOPPipU mediated coupling with Fmoc-Orn(Boc)-OH, and subsequent acylation of a free .alpha.-amine with thymin-1-ylacetic acid. Thyminyl decamers were prepd. following this strategy and hybridization expts. indicated that they formed stable complexes with cRNA.

IT **207597-65-7P 207597-66-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of chirally pure ornithine based PNA analogs)

IT **207597-64-6P 207803-03-0P 207803-05-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of chirally pure ornithine based PNA analogs)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:82153 HCAPLUS
DOCUMENT NUMBER: 128:167703
TITLE: Design and synthesis of new types of oligonucleopeptides
AUTHOR(S): Korshunova, Galina A.; Ilicheva, Irina A.; Sumbatyan, natalie V.; Hyun, Kwang-chul
CORPORATE SOURCE: A.N. Belozersky Inst. Physico-Chemical Biol. Chem. Dep., Moscow State Univ., Moscow, 119899, Russia
SOURCE: Letters in Peptide Science (1997), 4(4/5/6), 473-476
CODEN: LPSCEM; ISSN: 0929-5666
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Design and synthesis of oligonucleopeptides (ONPs), structural analogs of oligonucleotides, where the phosphodiester backbone is substituted by a

peptide chain, are described. Oligonucleopeptides, in which the no. of ordinary bonds between the nucleobases is six and the no. of bonds between the backbone and nucleobase is two or four, were constructed using two different approaches. The first way is based on incorporation of thyminylalanine residues into the peptide chain alternatively with glycine residues. Exptl. studies of the stability of oligonucleotide-oligonucleopeptide complexes as well as model estns. of their potential surfaces indicated the low DNA binding efficiency of this type of reagents. The second approach consists of synthesis of .omega.-ornithine peptides followed by modification of the backbone with thyminylacetaldehyde attached to an .alpha.-amino function of ornithine residues through Schiff bases. ONPs were synthesized using the solid-phase method.

IT **202926-79-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(design and synthesis of new types of oligonucleopeptides)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1997:105200 HCAPLUS
DOCUMENT NUMBER: 126:118198
TITLE: Preparation of branched peptides containing photoactive groups
INVENTOR(S): Berg, Rolf Henrik; Hvilsted, Soeren; Ramanujam, P. S.
PATENT ASSIGNEE(S): Forskningscenter Risoe, Den.; Berg, Rolf Henrik; Hvilsted, Soeren; Ramanujam, P. S.
SOURCE: PCT Int. Appl., 186 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9638410	A1	19961205	WO 1996-DK237	19960603
W: AL, AM, AT, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, CZ, DE, DE, DK, DK, EE, EE, ES, FI, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9658935	A1	19961218	AU 1996-58935	19960603
EP 828709	A1	19980318	EP 1996-916021	19960603
EP 828709	B1	20020918		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 224362	E	20021015	AT 1996-916021	19960603
ES 2183954	T3	20030401	ES 1996-916021	19960603
US 6376655	B1	20020423	US 1997-973179	19971202

PRIORITY APPLN. INFO.: DK 1995-628 A 19950602
WO 1996-DK237 W 19960603

AB The invention relates to novel monodisperse or polydisperse compds., in general named DNO (diamino acid N.alpha.-substituted oligopeptides), preferably low mol. wt. polypeptides, e.g., based on ornithine, lysine, diaminobutyric acid, diaminopropionic acid, aminoethylglycine or other amino acids or peptides having azobenzenes or other phys. functional groups, e.g.,photoresponsive groups, as side chains. These compds. may be synthesized using solid phase peptide synthesis techniques. Materials, e.g. thin films, comprising such compds. may be used for optical storage of information (holog. data storage), nonlinear optics (NLO), as photoconductors, photonic band-gap materials, elec. conducting materials,

electroluminescent materials, piezo-elec. materials, pyroelec. materials, magnetic materials, ferromagnetic materials, ferroelec. materials, photorefractive materials, or materials in which light-induced conformational changes can be produced. Optical anisotropy may reversibly be generated with polarized laser light whereby a hologram is formed. First order diffraction efficiencies of up to around 80% have been obtained.

IT **184633-50-9P 184633-51-0P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of branched peptides contg. photoactive groups)

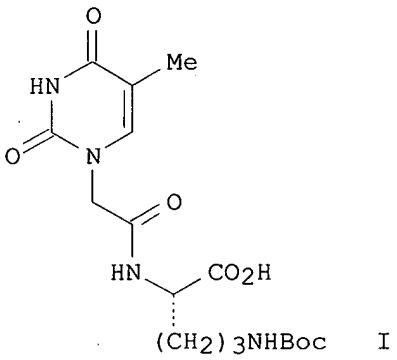
L3 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:625776 HCAPLUS
DOCUMENT NUMBER: 126:39584
TITLE: Peptide oligomers for holographic data storage
AUTHOR(S): Berg, Rolf H.; Hvilsted, Soeren; Ramanujam, P. S.
CORPORATE SOURCE: Risoe Natl. Lab., Roskilde, Den.
SOURCE: Nature (London) (1996), 383(6600), 505-508
CODEN: NATUAS; ISSN: 0028-0836
PUBLISHER: Macmillan Magazines
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Several classes of org. materials (such as photoanisotropic liq.-cryst. polymers and photorefractive polymers) are being investigated for the development of media for optical data storage. Here we describe a new family of org. materials-peptide oligomers contg. azobenzene chromophores-which appear particularly promising for erasable holog. data storage applications. The rationale for our approach is to use the structural properties of peptide-like mols. to impose orientational order on the chromophores, and thereby optimize the optical properties of the resulting materials. Here we show that holog. gratings with large first-order diffraction efficiencies (up to 80%) can be written and erased optically in oligomer films only a few micrometers thick. The holograms also exhibit good thermal stability, and are not erased after heating to 180.degree.C for one month. Straightforward extension of this peptide-based strategy to other mol. structures should allow the rationale design of a wide range of org. materials with potentially useful optical properties.
IT **184633-50-9P 184633-51-0P**
RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(peptide oligomers for holog. data storage)

L3 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:340170 HCAPLUS
Correction of: 1996:234106
DOCUMENT NUMBER: 125:2444
Correction of: 124:308720
TITLE: Gel shift assay: demonstration of enhanced binding of oligo(.delta.)-L-ornithine-oligodeoxynucleotide conjugates to complementary DNA and RNA
AUTHOR(S): Zhu, Tianmin; Pooyan, Shahriar; Wei, Ziping; Leibowitz, Michael J.; Stein, Stanley
CORPORATE SOURCE: Cent. Adv. Biotechnol. Med., Piscataway, NJ, 08854, USA
SOURCE: Antisense & Nucleic Acid Drug Development (1996), 6(1), 69-74
CODEN: ANADF5; ISSN: 1087-2906
PUBLISHER: Liebert
DOCUMENT TYPE: Journal
LANGUAGE: English
AB An increase in melting temp. for DNA:DNA duplexes had been obsd. previously (Zhu et al. Antisense Res. Dev. 3:349-356, 1993) when an

oligo(.delta.)ornithine moiety was covalently appended to a short oligodeoxynucleotide. We now report the anal. of duplex formation by electrophoretic gel shift anal. In the particular example studied, an increase in Tm of 4.degree. was found to correspond to about a 5-fold increase in binding const. A similar enhancement by the appended cationic peptide was obsd. when the target strand was RNA. The use of a competitive assay format for avoidance of adsorptive loss at low concns. (<10-7M) of the oligonucleotide-oligo(.delta.)ornithine conjugate is presented.

IT **176390-30-0D**, oligodeoxyribnucleotide conjugates
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(enhanced binding of oligo(.delta.)-L-ornithine-oligodeoxynucleotide conjugates to complementary DNA and RNA)

L3 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:265550 HCAPLUS
DOCUMENT NUMBER: 125:59113
TITLE: Synthesis and oligomerization of N.delta.-Boc-N.alpha.-(thymin-1-ylacetyl)ornithine
AUTHOR(S): Petersen, Kenneth H.; Buchardt, Ole; Nielsen, Peter E.
CORPORATE SOURCE: Center Biomol. Recognition H. C. Orsted Inst., Univ. Copenhagen, Copenhagen, DK-2100, Den.
SOURCE: Bioorganic & Medicinal Chemistry Letters (1996), 6(7), 793-6
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

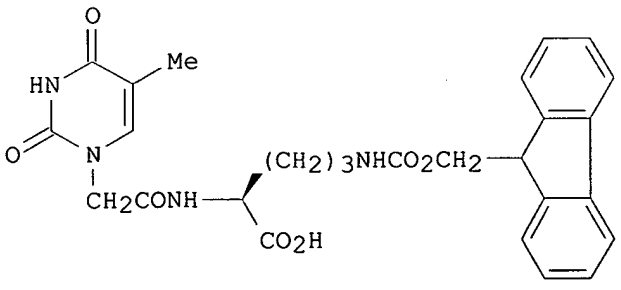
AB The synthesis of a new DNA analog I (Boc = Me3CO2C) based on ornithine is described. Only the thymine analog was synthesized. A 10 mer entirely made up of I forms a triple helix with poly(A). The Tm of the triplex was 21.degree..

IT **175431-23-9P**
RL: PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and oligomerization of a protected (thyminylacetyl)ornithine)

IT **177913-36-9P 178036-67-4P 178036-67-4P**
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and oligomerization of a protected (thyminylacetyl)ornithine)

L3 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:234106 HCAPLUS
DOCUMENT NUMBER: 124:308720
TITLE: Gel shift assay: demonstration of enhanced binding of oligo(.delta.)-L-ornithine-oligodeoxynucleotide conjugates to complementary DNA and RNA
AUTHOR(S): Zhu, Tianmin; Pooyan, Shahriar; Wei, Ziping; Leibowitz, Michael J.; Stein, Stanley
CORPORATE SOURCE: Center Advanced Biotechnol. Med., Piscataway, NJ, 08854, USA
SOURCE: Antisense & Nucleic Acid Drug Development (1996), 6(1), 69-74
CODEN: ANADF5; ISSN: 1087-2906
PUBLISHER: Liebert
DOCUMENT TYPE: Journal
LANGUAGE: English
AB An increase in melting temp. for DNA:DNA duplexes had been obsd. previously (Zhu et al. Antisense Res. Dev. 3:349-356, 1993) when an oligo(.delta.)ornithine moiety was covalently appended to a short oligodeoxynucleotide. We now report the anal. of duplex formation by electrophoretic gel shift anal. In the particular example studied, an increase in Tm of 4.degree. was found to correspond to about a 5-fold increase in binding const. A similar enhancement by the appended cationic peptide was obsd. when the target strand was RNA. The use of a competitive assay format for avoidance of adsorptive loss at low concns. (<10-7M) of the oligonucleotide-oligo(.delta.)ornithine conjugate is presented.
IT **176390-30-0D**, oligodeoxynucleotide conjugates
RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
(enhanced binding of oligo(.delta.)-L-ornithine-oligodeoxynucleotide conjugates to complementary DNA and RNA)

L3 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1996:94448 HCAPLUS
DOCUMENT NUMBER: 124:290226
TITLE: Synthesis of a new chiral peptide analog of DNA using ornithine subunits and solid-phase peptide synthesis methodologies
AUTHOR(S): Lioy, Eduardo; Kessler, Horst
CORPORATE SOURCE: Inst. Organische Chemie Biochemie, Technischen Univ. Muenchen, Garching, D-85747, Germany
SOURCE: Liebigs Annalen (1996), (2), 201-4
CODEN: LANAEM; ISSN: 0947-3440
PUBLISHER: VCH
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The synthesis of 3 chiral peptide nucleic acids by SPPS methodologies according to the Fmoc strategy starting from L- or D-ornithine and thymine via the chiral monomer I and its enantiomer is described.

IT **175431-23-9DP**, resin bound **175431-25-1DP**, resin bound **175431-26-2DP**, resin bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of chiral DNA peptide analogs with ornithine subunits)

IT **175431-23-9P 175431-25-1P 175431-26-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of chiral DNA peptide analogs with ornithine subunits)

L3 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:994981 HCAPLUS
DOCUMENT NUMBER: 124:108909
TITLE: Cyclic polycationic polymer-oligonucleotide conjugates and methods for preparing same
INVENTOR(S): Stein, Stanley; Wei, Ziping; Zhu, Tianmin; Tung, Ching-Hsuan
PATENT ASSIGNEE(S): University of Medicine and Dentistry of New Jersey, USA
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9524222	A1	19950914	WO 1995-US2894	19950307
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, UZ, VN				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9521169	A1	19950925	AU 1995-21169	19950307

PRIORITY APPLN. INFO.: US 1994-207438 A 19940307
WO 1995-US2894 W 19950307

AB Provided are cyclic polycationic polymer-oligonucleotide conjugates comprising a polycationic polymer covalently bonded at each end to the 3'- and 5'- terminal nucleotides of a polyanionic oligonucleotide via a crosslinking agent. The polycationic polymer may be represented by R2[XR1CH(NH2)CO]aR3 (I), R2[XR6R7COXC(R4R5)HCO]aR3 (II), R2[XC(R4R5)HCOXR6(R7)CO]aR3 (III), R1-[[NH(CH2)b]c[NH(CH2)d]e]f[NH(CH2)g]h-NHR2 (IV), R2[XC(R4R5)HCO]iR3 (V), R2[XR6(R7)COXC(R4R5)HCOXR6(R7)CO]aR3 (VI), R2[XC(R4R5)HCOXR6(R7)COXC(R4R5)HCO]aR3 (VII), or R2[XCR4R5HCOXC(R4R5)HCOXR6(R7)CO]aR3 (VIII) (R1 through R7, X, and a through i, are defined). The polycationic polymer linked in a cyclic fashion to the polyanionic oligonucleotide helps the oligonucleotide bind to complementary strands through the interactions with the oligonucleotide. The cyclic conjugates have applications in antisense and anti-gene fields. Prepn. of TTTATT-Cys(Leu-Lys)2-Lys(Leu-Lys)2Cys-CATTTC conjugate which was then cyclized by DNA T4 ligase was shown.

IT **171772-43-3P**
RL: NUU (Other use, unclassified); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(polycationic polymer; for cyclic peptide-oligonucleotide conjugates prepn. and its use as antisense DNA)

L3 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:994167 HCAPLUS
DOCUMENT NUMBER: 124:66581
TITLE: Triplex-forming paired-ion oligonucleotides and methods for preparing and using same
INVENTOR(S): Stein, Stanley; Tung, Ching-Hsuan
PATENT ASSIGNEE(S): University of Medicine and Dentistry of New Jersey, USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9520404	A1	19950803	WO 1994-US1090	19940131
W: AT, AU, BB, BG, BR, BY, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, KR, KZ, LK, LU, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9461682	A1	19950815	AU 1994-61682	19940131

PRIORITY APPLN. INFO.: WO 1994-US1090 W 19940131
AB A triple-stranded DNA useful in gene therapy which comprises a paired-ion oligonucleotide bound to a complementary double-stranded DNA, wherein the paired ion oligonucleotide comprises a polyanionic triplex-forming oligonucleotide covalently bonded to a polycationic polymer via a crosslinking agent.
IT **156311-81-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of triplex-forming paired-ion oligonucleotides for therapeutic use)

L3 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:820573 HCAPLUS
DOCUMENT NUMBER: 123:257406
TITLE: Preparation of nucleic acid-binding oligomers with amino acid-containing backbones and nucleobase-containing side chains for therapy and diagnosis.
INVENTOR(S): Loebberding, Antonius; Mielke, Burkhard; Schwemler, Chrostoph; Schwenner, Eckhardt; Stropp, Udo; Springer, Wolfgang; Kretschmer, Axel; Poetter, Thorsten
PATENT ASSIGNEE(S): Bayer A.-G., Germany
SOURCE: Ger. Offen., 46 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4331011	A1	19950316	DE 1993-4331011	19930913
EP 646596	A1	19950405	EP 1994-113573	19940831
EP 646596	B1	19990526		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, NL, SE				
AT 180494	E	19990615	AT 1994-113573	19940831
ES 2131612	T3	19990801	ES 1994-113573	19940831
AU 9471619	A1	19950323	AU 1994-71619	19940901

JP 07112969	A2	19950502	JP 1994-238619	19940907
CA 2131760	AA	19950314	CA 1994-2131760	19940909
US 5849893	A	19981215	US 1996-719048	19960924

PRIORITY APPLN. INFO.: DE 1993-4331011 19930913
US 1994-300910 19940906

OTHER SOURCE(S): MARPAT 123:257406

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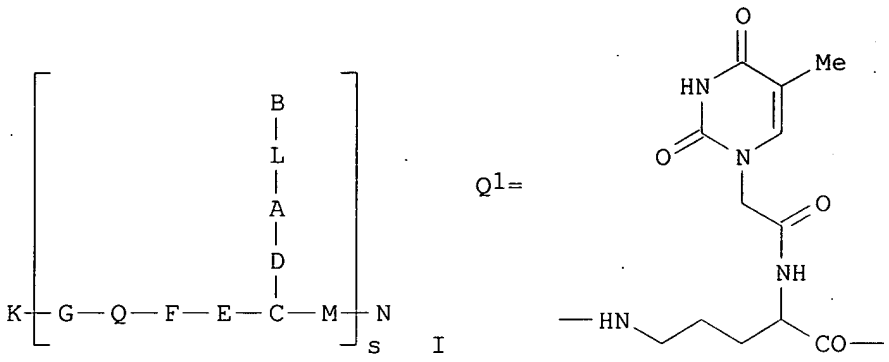

AB Title compds. [I; A = CO, CHR, CRR'; R, R' = H, Oh, alkyl, aralkyl, aryl; B = H, OH, alkanoyl, DNA intercalator, aryl, heterocyclyl, (modified) naturally occurring nucleobase; C = CH, CR; D = NH, CH2, CHR, CRR'; E = NR, CHR, CRR', O, S; A can be bonded to E via (CH2)n; n = 0-2; F = CH2, CO, SO2, SO, CS; Q = (CR1R2)m; m = 0-2; R1, R2 = (un)natural amino acid residue; G can be bonded to Q by (CH2)n; G = NH, NR, O, S; M = CH2, CO, SO2, SO, CS; L = (CH2)p, CHR, CRR'; p = 0-2; K, N = H, carrier system, reporter ligand, soly. enhancing group; s = 1-30], were prepd. for control of gene expression (no data). Thus, H-(Q1)3-Gly-OH was prepd. by solid phase synthesis using BOC-protected reactants (prepn. given) on phenylacetamidomethyl resin. Title compds. are said to have antiviral activity.

IT **168264-35-5P 168264-36-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of nucleic acid-binding oligomers with amino acid-contg. backbones and nucleobase-contg. side chains for therapy and diagnosis)

L3 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:15800 HCAPLUS
DOCUMENT NUMBER: 122:56488
TITLE: Preparation of Vitamin B6-Conjugated Peptides at the Amino Terminus and of Vitamin B6-Peptide-Oligonucleotide Conjugates
AUTHOR(S): Zhu, Tianmin; Stein, Stanley
CORPORATE SOURCE: Center for Advanced Biotechnology and Medicine, Piscataway, NJ, 08854, USA
SOURCE: Bioconjugate Chemistry (1994), 5(4), 312-15
CODEN: BCCHES; ISSN: 1043-1802
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of N-(4'-pyridoxyl)peptides has been made by std. 9-fluorenylmethoxycarbonyl (Fmoc) chem. and a solid-phase coupling procedure. The last Fmoc group of the peptide was removed on the synthesizer, and the free amino group was then condensed with pyridoxal. The Schiff base formed was selectively reduced using sodium

cyanoborohydride. The product was cleaved from the resin using a std. procedure. No deleterious effects were found when using the protected amino acids Fmoc-L-Ala-OH, Fmoc-L-Arg(Pmc)-OH (Pmc = 2,2,5,7,8-pentamethylchroman-6-sulfonyl), Fmoc-L-Asp(OCMe3)-OH, Fmoc-L-His(CMe3)-OH, Fmoc-L-Ser(CMe3)-OH, Fmoc-L-Thr(CMe3)-OH, and Fmoc-L-Cys(CMe3)-OH for peptide synthesis. A vitamin B6-peptide-oligonucleotide conjugate could be synthesized using a cysteinyl peptide and a suitably activated oligonucleotide.

IT **160056-07-5P 160056-09-7P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, via solid-phase peptide synthesis and on-resin reductive alkylation with pyridoxal)

IT **160056-08-6P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, via solid-phase peptide synthesis and on-resin reductive alkylation with pyridoxal, and S-alkylation of, with (iodoacetyl)oligonucleotide)

L3 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1995:4160 HCAPLUS
DOCUMENT NUMBER: 122:139492
TITLE: Oligonucleotide-poly-L-ornithine conjugates: binding to complementary DNA and RNA
AUTHOR(S): Zhu, Tianmin; Wei, Ziping; Tung, Ching Hsuan; Dickerhof, Walter A.; Breslauer, Kenneth J.; Georgopoulos, Denise E.; Leibowitz, Michael J.; Stein, Stanley
CORPORATE SOURCE: Cent. Adv. Biotechnol. Med., Piscataway, NJ, 08854, USA
SOURCE: Antisense Research and Development (1993), 3(3), 265-75
CODEN: AREDEI; ISSN: 1050-5261
DOCUMENT TYPE: Journal
LANGUAGE: English

AB On the basis of the reported enhanced antisense activity of polylysine-oligonucleotide conjugates, a synthetic 12-mer oligodeoxyribonucleotide has been coupled at its 5' terminus to a series of pos. charged (.delta.-ornithine)ncysteine peptides. Binding between the nucleic acid-peptide conjugate and its complementary DNA target sequence was detected by the impact of complexation on the melting temp. (Tm). It was found that the Tm for the nucleic acid-peptide gradually increased with increasing net charge on the conjugated peptide. Site-directed cleavage with RNase H demonstrates that the peptide-modified oligomer also hybridizes with its RNA target sequence. Increased affinity for target mRNA with net charge was shown by a cell-free translation arrest assay.

IT **160741-45-7P 160741-46-8P 160741-47-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(oligonucleotide-polyornithine conjugates binding to complementary DNA and RNA)

L3 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1994:580123 HCAPLUS
DOCUMENT NUMBER: 121:180123
TITLE: Paired-ion oligonucleotides and methods for preparing same
INVENTOR(S): Tung, Ching Hsuan; Tung, Ching-hsuan; Zhu, Tianmin
PATENT ASSIGNEE(S): University of Medicine and dentistry of New Jersey, USA
SOURCE: PCT Int. Appl., 52 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9320090	A1	19931014	WO 1993-US3161	19930405
W: AT, AU, BB, BG, BR, CA, CH, CZ, DE, DK, ES, FI, GB, HU, JP, KP, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SK, UA				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9339454	A1	19931108	AU 1993-39454	19930405

PRIORITY APPLN. INFO.: US 1992-850555 19920406
WO 1993-US3161 19930405

AB A paired-ion oligonucleotide comprising a polyanionic oligonucleotide covalently bonded to a polycatonic polymer via a crosslinking agent, was prepd. The products have enhanced hybridization strengths. Thus, the pseudopeptide-linked oligonucleotide I [X = maleimidobenzoylaminohexyl] was prepd. from the pseudopeptide and the oligonucleotide. I was more effective in inhibiting the translation of its target mRNA from killer virus of yeast into protein than the unconjugated 5'-CATTTCTTTATT-3'.

IT **156311-81-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, in prepn. of oligonucleotide-pseudoprotein conjugate)

L3 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1990:99263 HCAPLUS
DOCUMENT NUMBER: 112:99263
TITLE: Preparation of antitumor isopolypeptides and pharmaceutical compositions
INVENTOR(S): Szokan, Gyula; Tyihak, Erno; Szende, Bela; Lapis, Karoly; Gaborjanyi, Richard; Almas, Marta
PATENT ASSIGNEE(S): Magyar Tudomanyos Akademia, Kutatas- es Szervezetelemzo Intezet, Hung.; Magyar Tudomanyos Akademia, Novenyvedelmi Kutato Intezet
SOURCE: Fr. Demande, 44 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2622195	A1	19890428	FR 1988-13807	19881021
HU 48279	A2	19890529	HU 1987-4723	19871021
HU 202553	B	19910328		
CN 1033633	A	19890705	CN 1988-107253	19881020
DK 8805859	A	19890422	DK 1988-5859	19881021
SE 8803765	A	19890422	SE 1988-3765	19881021
FI 8804890	A	19890422	FI 1988-4890	19881021
NL 8802604	A	19890516	NL 1988-2604	19881021
DE 3835962	A1	19890601	DE 1988-3835962	19881021
GB 2212810	A1	19890802	GB 1988-24694	19881021
ES 2012559	A6	19900401	ES 1988-3218	19881021
JP 02124861	A2	19900514	JP 1988-264255	19881021

PRIORITY APPLN. INFO.: HU 1987-4723 19871021
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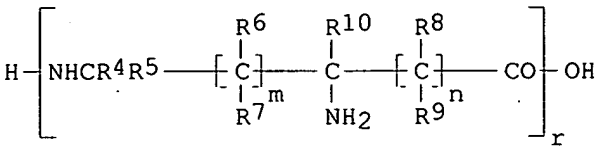

I

AB The title compds. [I; R4-R10 = H, alkyl; r = 10-400; m, n = 0, integer 1-10], useful as antitumor agents, are prepd. BOC-NH(CH2)4CH(NHZ)CO2Q (Q = C6H4NO2-p) was deprotected to give H2N(CH2)4CH(NHZ)CO2Q, which was coupled with BOC-NH(CH2)4CH(NHZ)CO2CO2CH2CHMe2 (II) to give BOC-NH(CH2)4CH(NHZ)CONH(CH2)4CH(NHZ)CO2Q. This was coupled with II to give BOC[NH(CH2)4CH(NHZ)CO]3OQ (III). III.HCl was polymd. in Me2SO contg. Et3N to give poly-.epsilon.-N.alpha.-benzyloxycarbonyl-L-lysine, which was deprotected and treated with HBr to give poly-.epsilon.-L-lysine-HBr. The tetradecamer of isopolylysine at 100 .mu.g/mL in vitro showed 100% inhibition of K-562 cells (5 .times. 104-mL) after 48 h incubation, whereas the concn. of cells grew to 130 .times. 103 cells/mL for the control.

IT **125156-34-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for antitumor isopolypeptides)

IT **125156-33-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of antitumor isopolypeptides)

L3 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1981:462659 HCAPLUS
DOCUMENT NUMBER: 95:62659
TITLE: Poly(.delta.-L-ornithine)
AUTHOR(S): Mathur, K. B.; Pandey, R. K.; Jagannadham, M. V.; Balasubramanian, D.
CORPORATE SOURCE: Med. Chem. Div., Cent. Drug Res. Inst., Lucknow, India
SOURCE: International Journal of Peptide & Protein Research (1981), 17(2), 189-96
CODEN: IJPPC3; ISSN: 0367-8377
DOCUMENT TYPE: Journal
LANGUAGE: English

GI For diagram(s), see printed CA Issue.

AB The title isopolypeptide (I) was prepd. by esterifying tripeptide II (BOC = Me3CO2C, Z = CO2CH2Ph, R = H) with HOC6Cl5 by DCC, Z-deblocking the resulting II (R = C6Cl5) by hydrogenolysis over Pd/C in MeOH contg. HCl/THF, polymg. the resulting Z-deblocked tripeptide in Me2SO contg. Et3N, and BOC-deblocking the resulting protected polymer (III). II (R = H) was prepd. by stepwise peptide couplings in soln. CD data indicated that I and III adopted a conformation in soln. similar to the .beta.-pleated sheet.

IT **78397-46-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and acidification of)

IT **78397-45-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and esterification of, with pentachlorophenols)

IT **78397-47-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and hydrogenolysis of)

IT **78408-95-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and polymn. of)
IT **78397-44-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and sapon. of)

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FILE 'CAOLD' ENTERED AT 18:09:35 ON 08 JUL 2003
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STRUCTURE FILE UPDATES: 7 JUL 2003 HIGHEST RN 544408-69-7
DICTIONARY FILE UPDATES: 7 JUL 2003 HIGHEST RN 544408-69-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

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Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

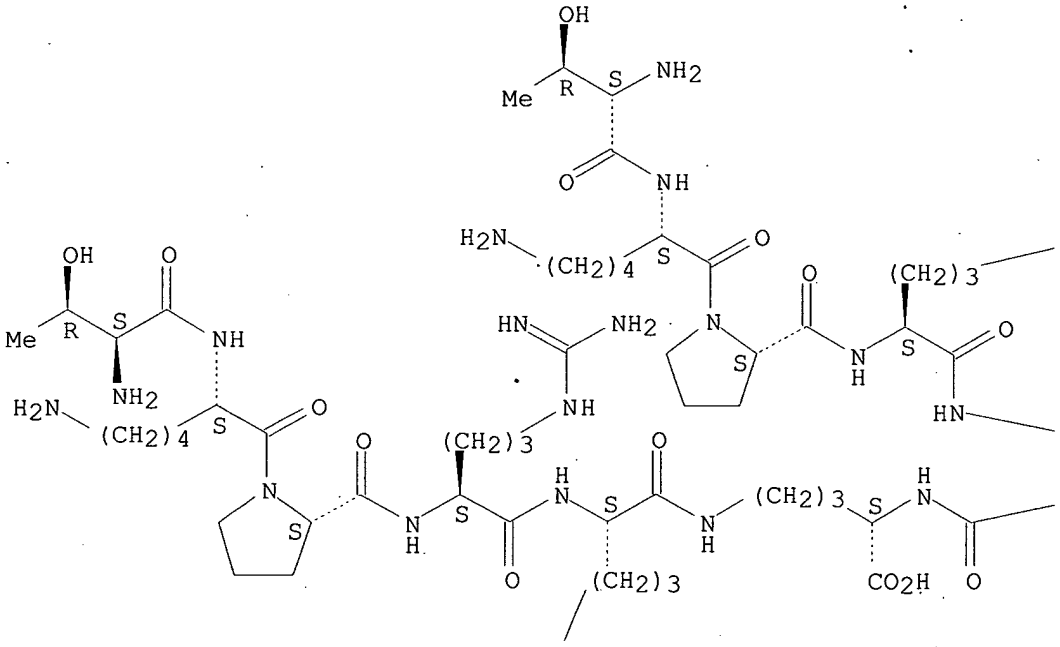
=>
=>

=> d ide can l2 1-51

L2 ANSWER 1 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 442878-14-0 REGISTRY
CN L-Ornithine, N2,N5-bis[N2,N5-bis(L-threonyl-L-lysyl-L-prolyl-L-arginyl)-L-ornithyl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C99 H184 N38 O24
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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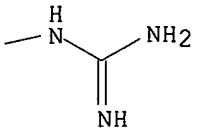

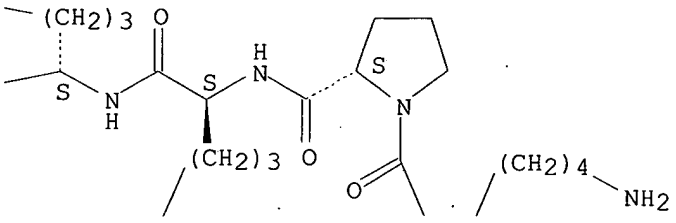

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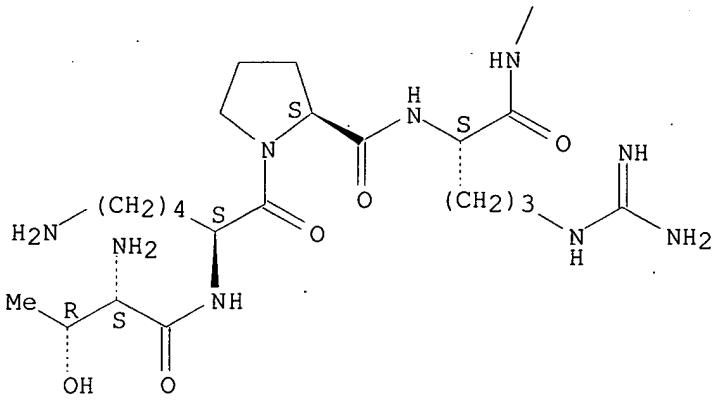

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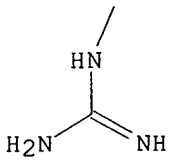

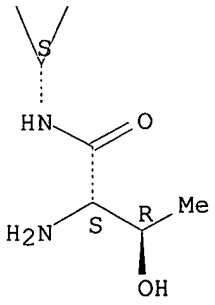

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 137:103865

L2 ANSWER 2 OF 51 REGISTRY COPYRIGHT 2003 ACS
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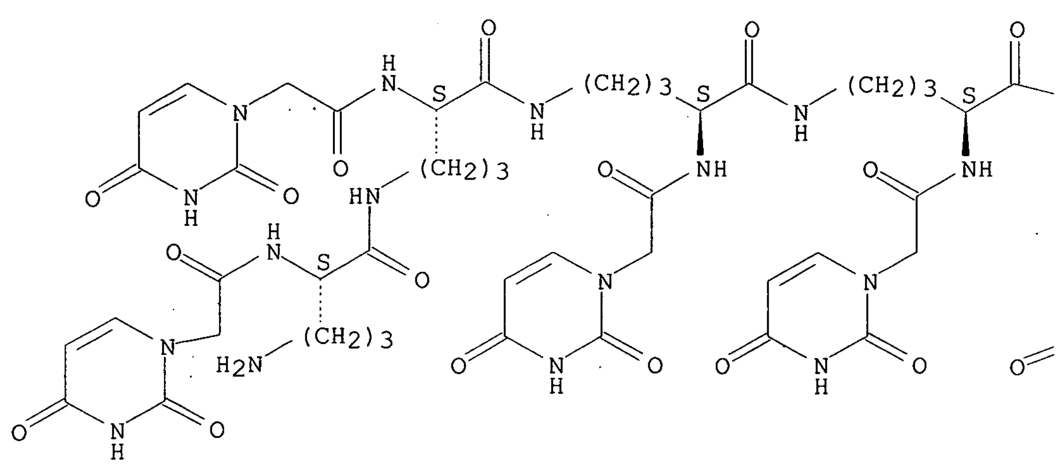
FS STEREOSEARCH
MF C112 H146 N42 O41
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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REFERENCE 1: 137:103865

L2 ANSWER 2 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 400748-18-7 REGISTRY
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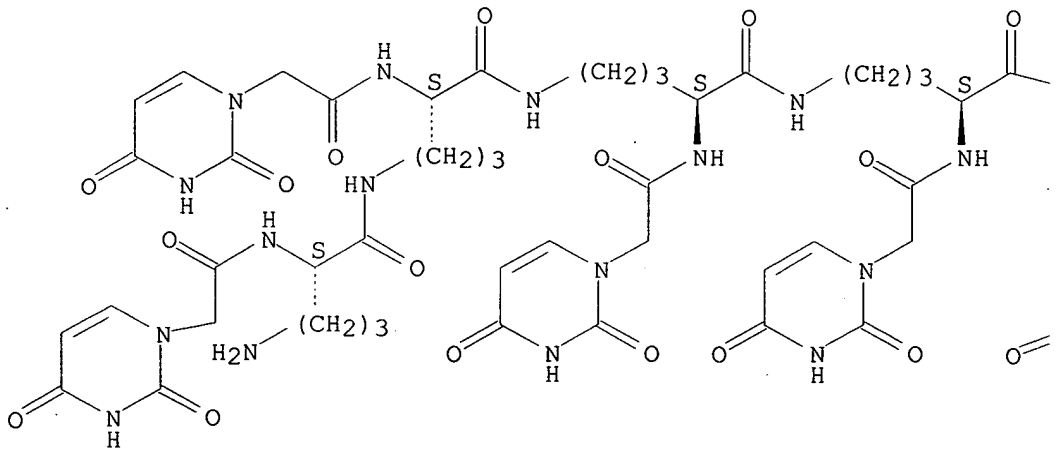
FS STEREOSEARCH
MF C112 H146 N42 O41
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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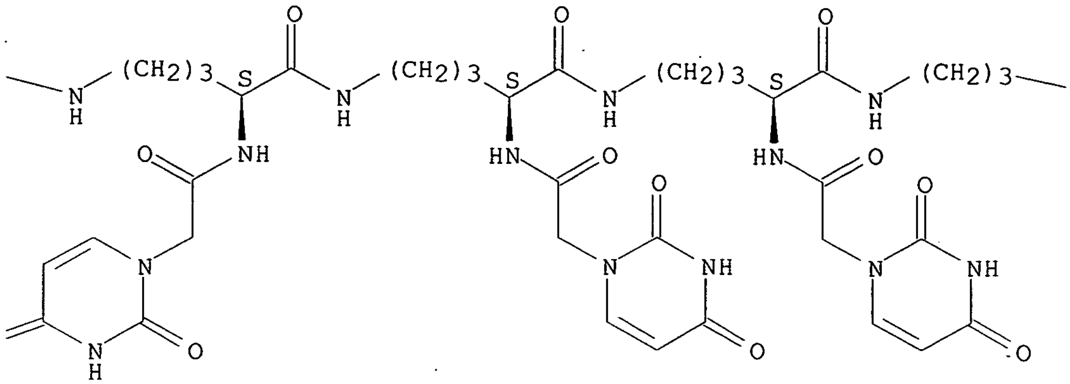

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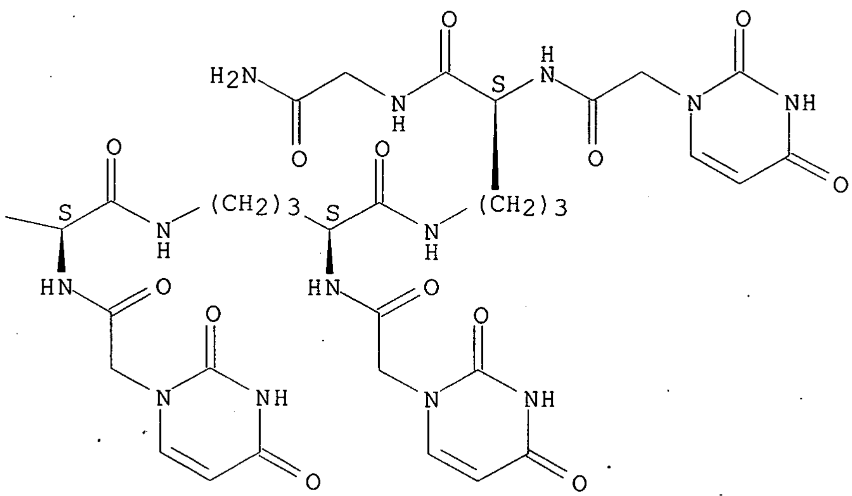

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:200464

L2 ANSWER 3 OF 51 REGISTRY COPYRIGHT 2003 ACS
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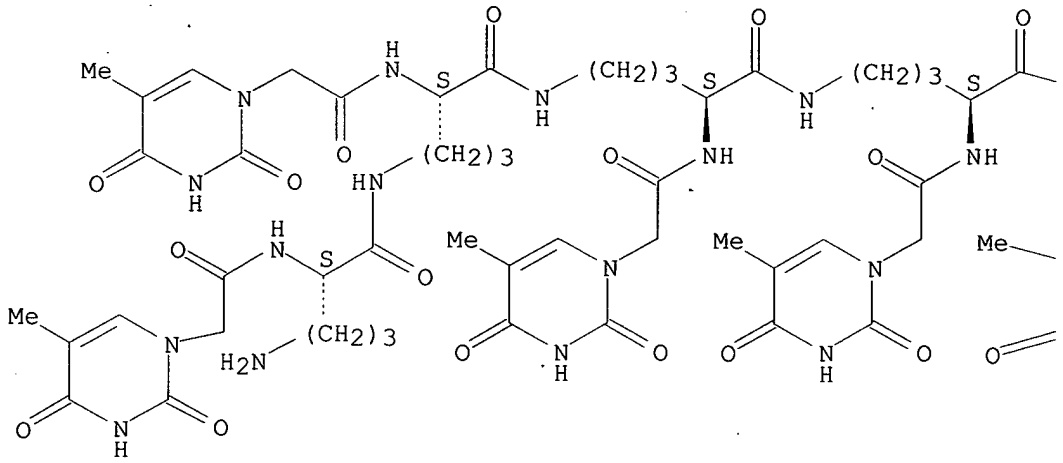
FS STEREOSEARCH
MF C122 H166 N42 O41
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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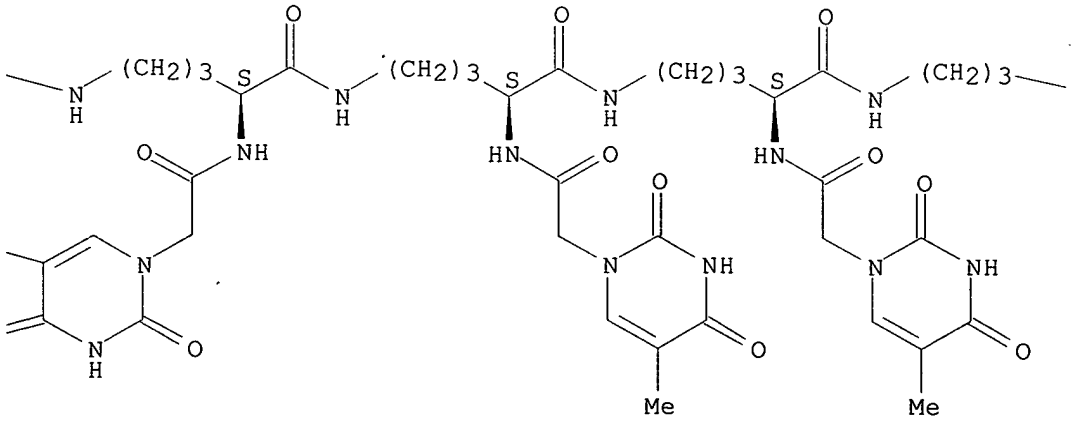

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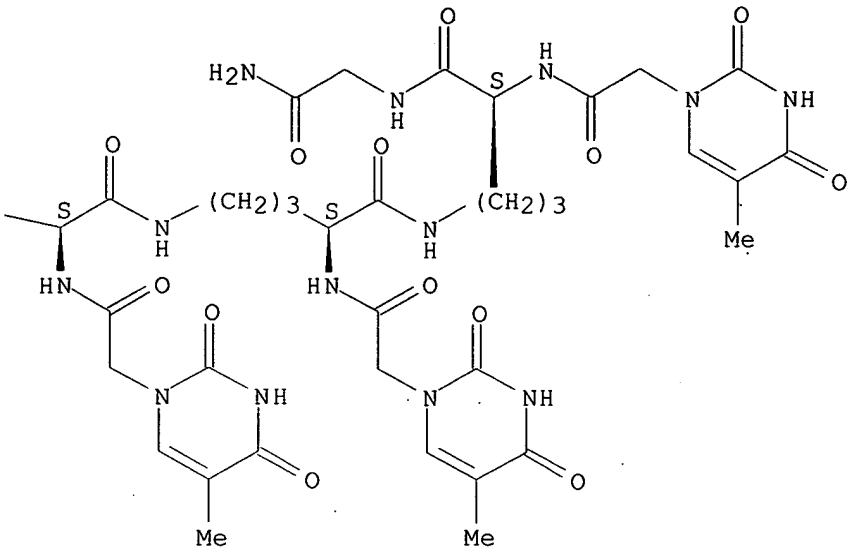

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1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:200464

L2 ANSWER 4 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 400748-06-3 REGISTRY
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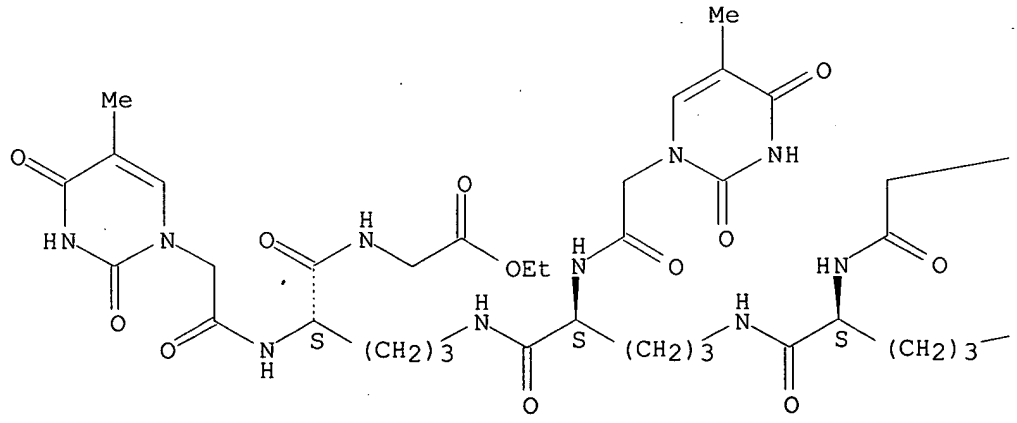
FS STEREOSEARCH
MF C64 H89 N21 O22
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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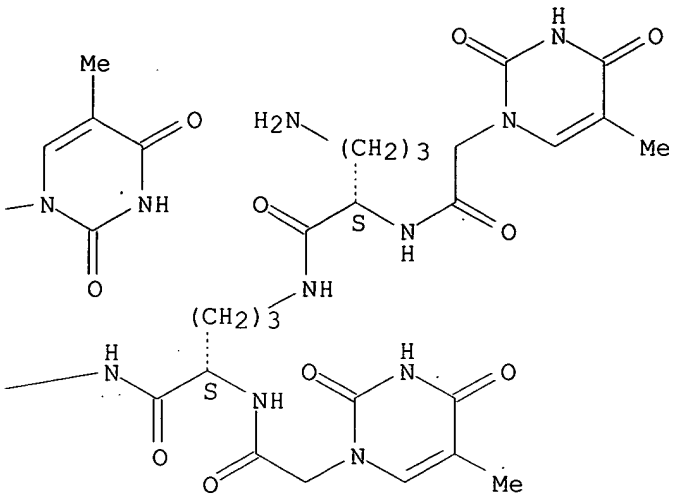

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:200464

L2 ANSWER 5 OF 51 REGISTRY COPYRIGHT 2003 ACS
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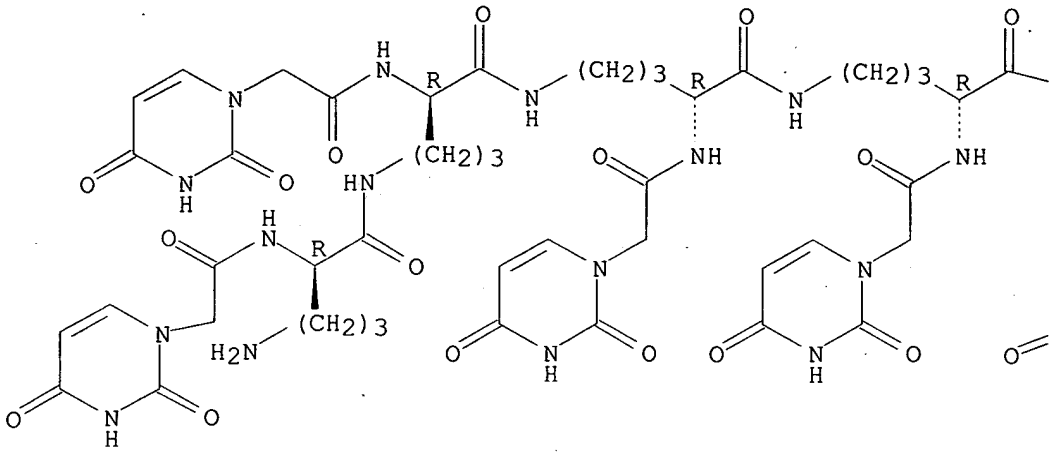
FS STEREOSEARCH
MF C112 H146 N42 O41
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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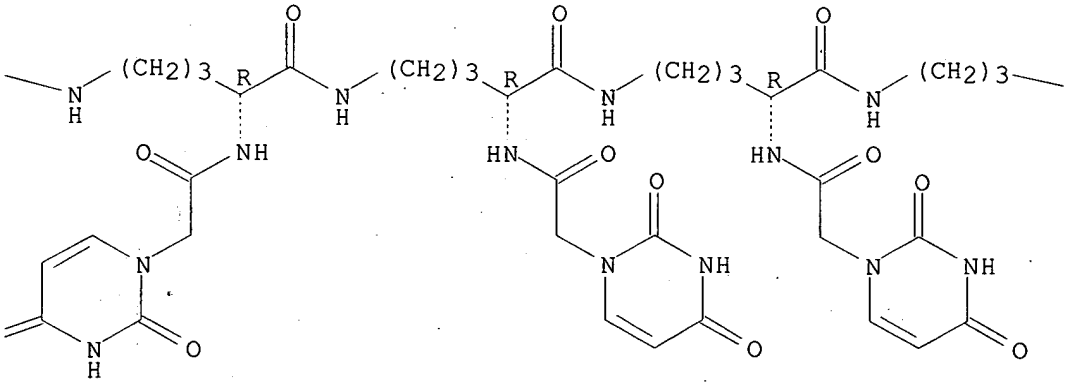

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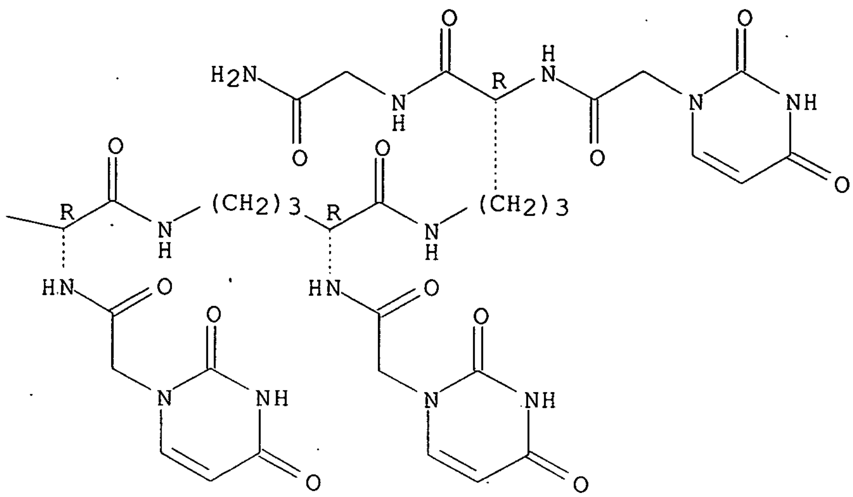

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1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:200464

L2 ANSWER 6 OF 51 REGISTRY COPYRIGHT 2003 ACS
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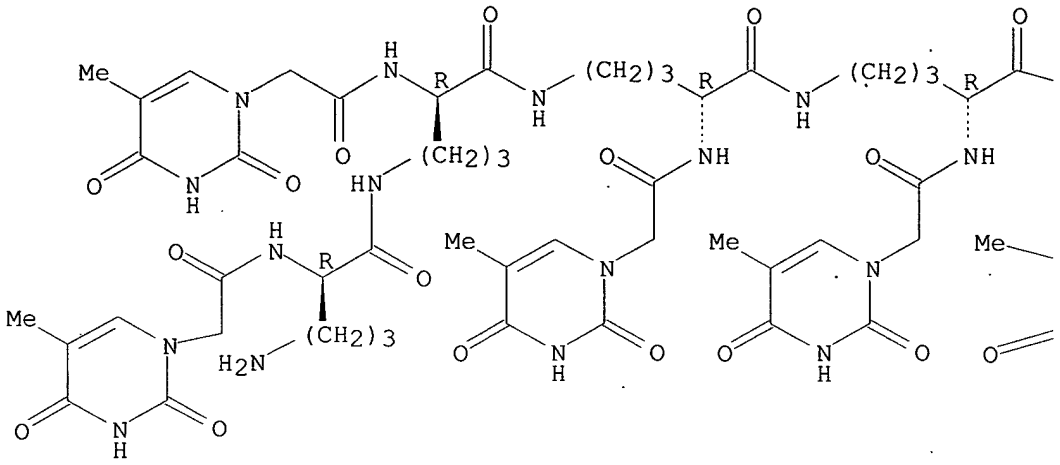
FS STEREOSEARCH
MF C122 H166 N42 O41
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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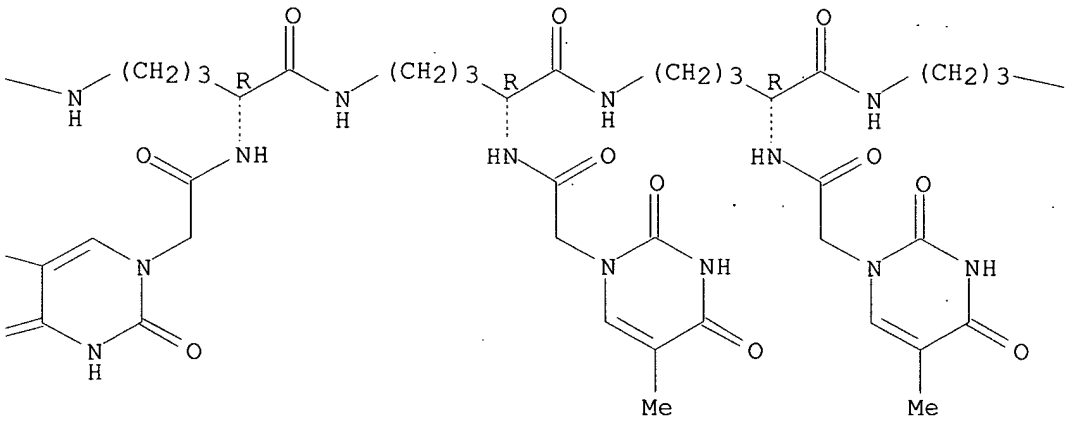

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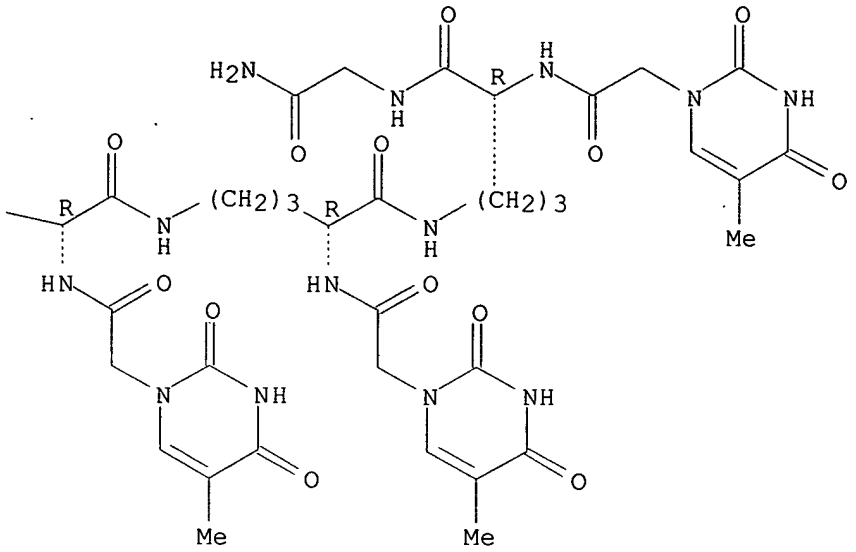

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1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:200464

L2 ANSWER 7 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 400747-81-1 REGISTRY
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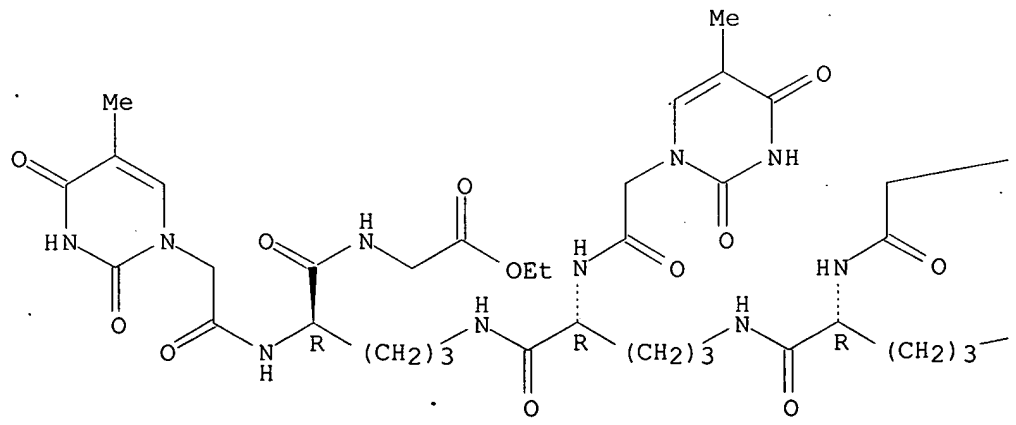
FS STEREOSEARCH
MF C64 H89 N21 O22
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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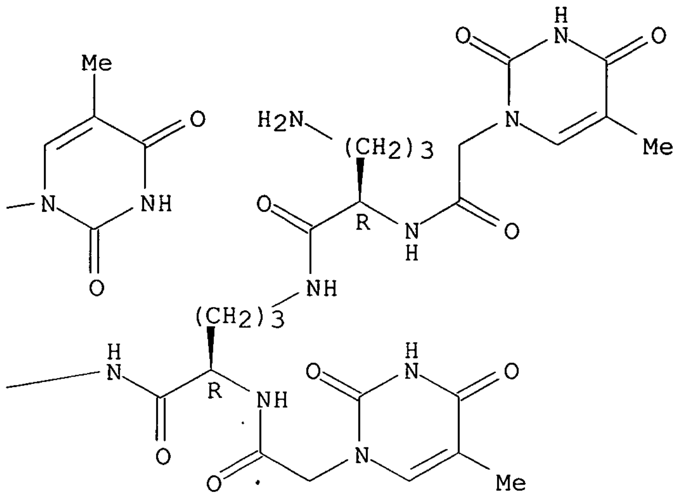

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 136:200464

L2 ANSWER 8 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 354821-33-3 REGISTRY
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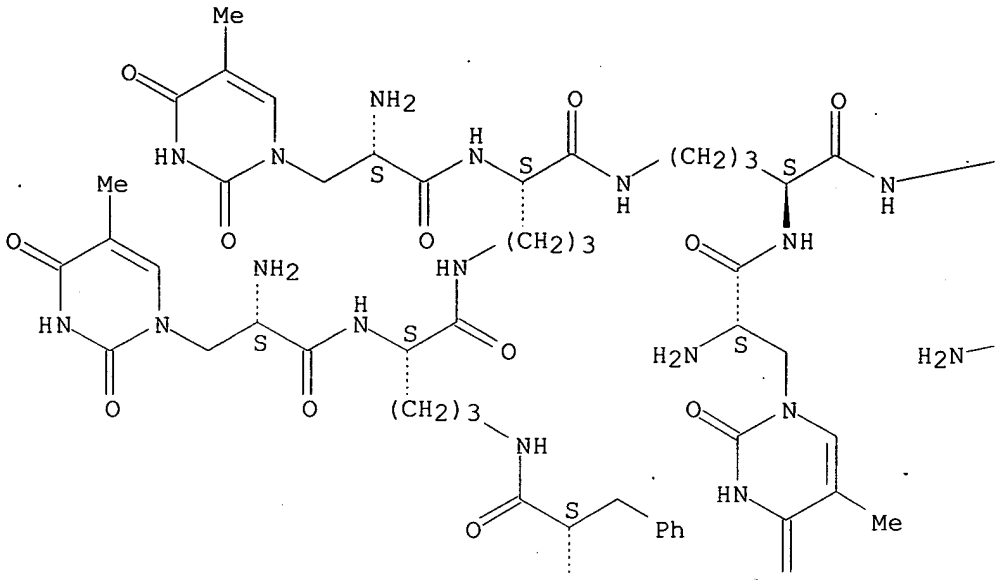
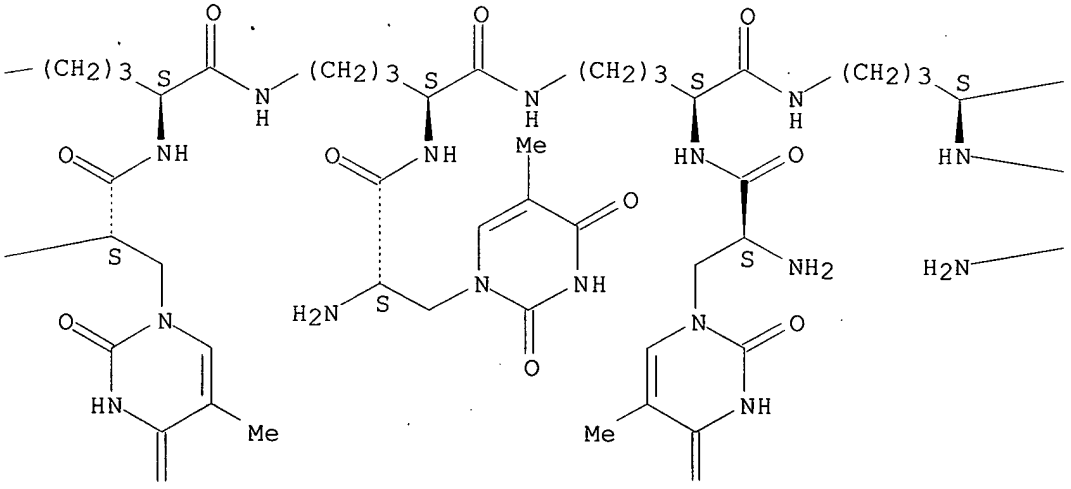
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C142 H206 N52 O43
SR CA
LC STN Files: CA, CAPLUS, CASREACT

Absolute stereochemistry.

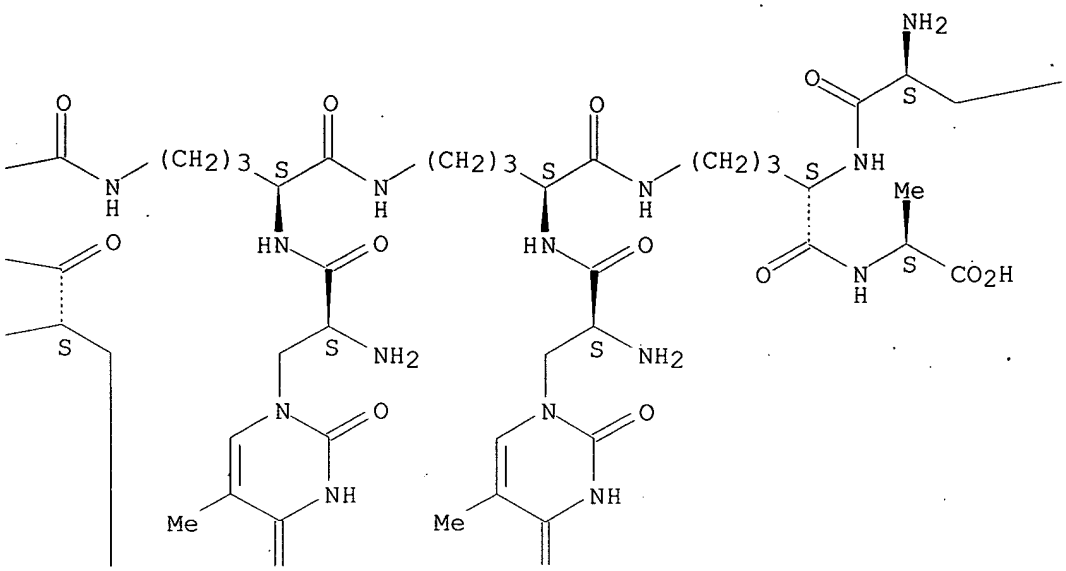
PAGE 1-A



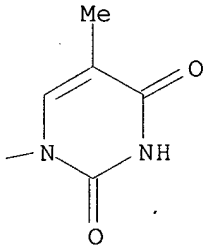
PAGE 1-B



PAGE 1-C



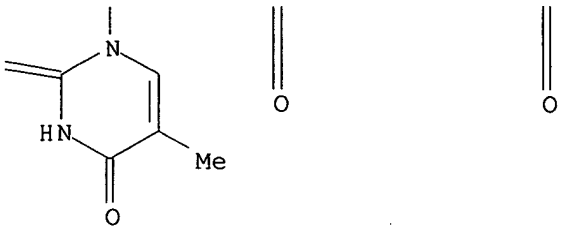
PAGE 1-D



PAGE 2-A

PAGE 2-B

PAGE 2-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

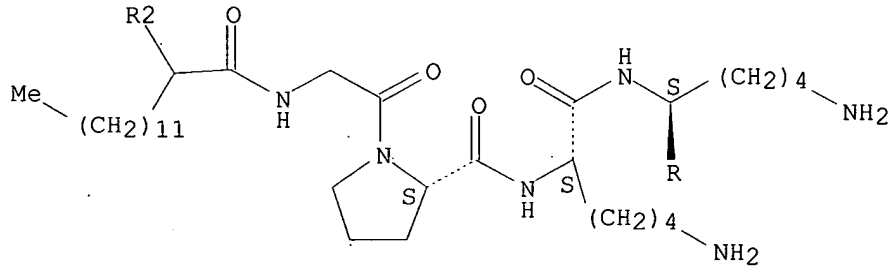
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 135:180940

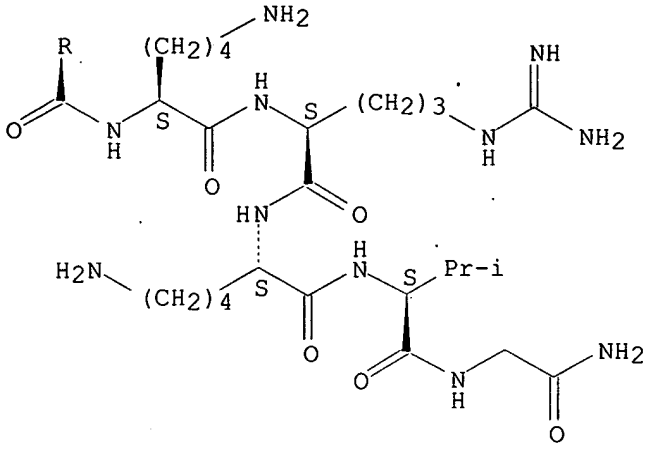
L2 ANSWER 9 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 261167-33-3 REGISTRY
CN Glycinamide, N2,N5-bis[N2,N5-bis(N2,N5-di-L-ornithyl-L-ornithyl)-L-ornithyl]-L-ornithyl-2-aminotetradecanoyl-2-aminotetradecanoyl-2-aminotetradecanoylglycyl-L-prolyl-L-lysyl-L-lysyl-L-lysyl-L-arginyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 12: PN: WO0016807 FIGURE: 2 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C161 H316 N50 O27
SR CA
LC STN Files: CA, CAPLUS

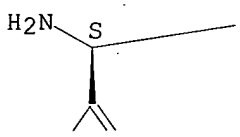
Absolute stereochemistry.

PAGE 1-A



PAGE 2-A





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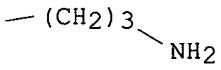
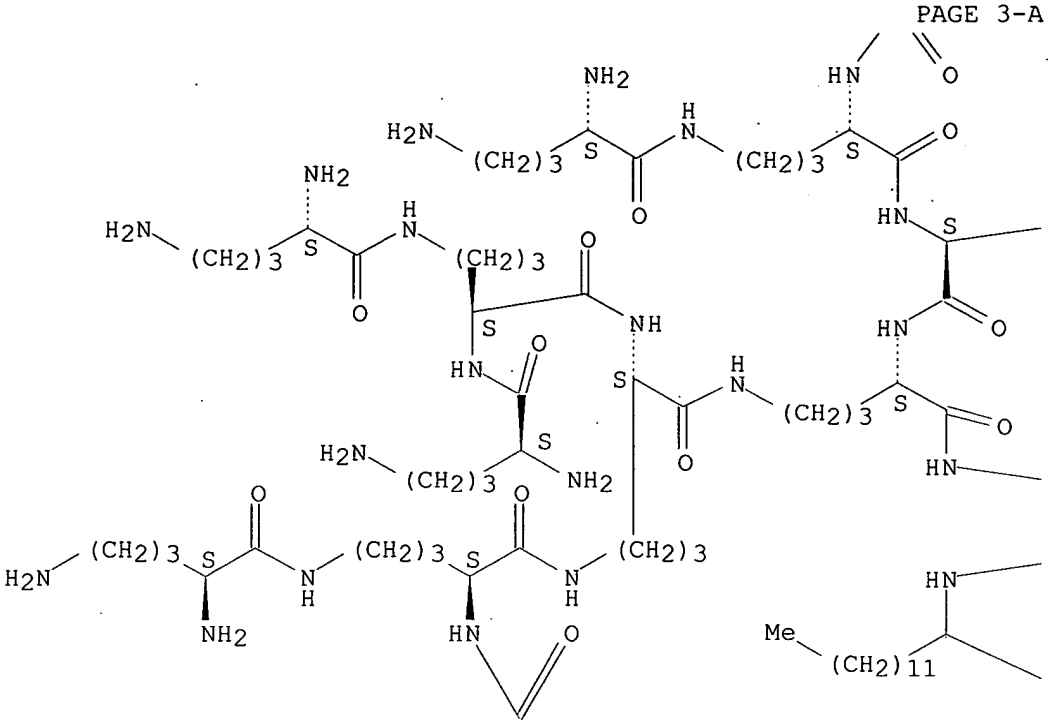
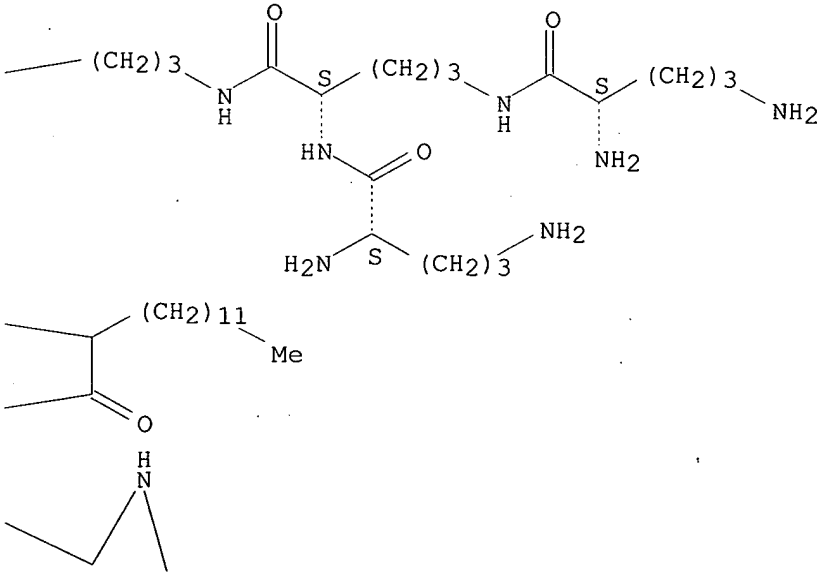
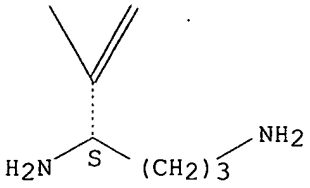


PAGE 3-A

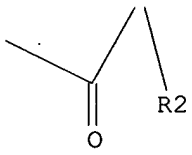


PAGE 3-B





PAGE 4-A



PAGE 4-B

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

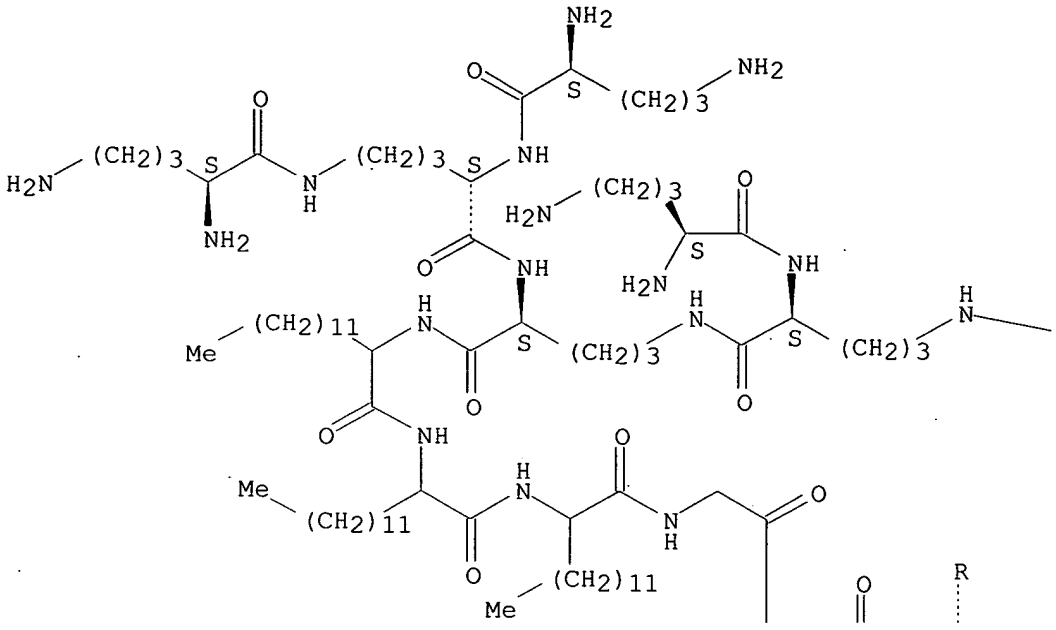
REFERENCE 1: 132:255952

REFERENCE 2: 132:227244

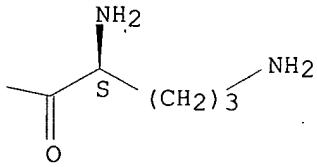
L2 ANSWER 10 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 261167-32-2 REGISTRY
CN Glycinamide, N2,N5-bis(N2,N5-di-L-ornithyl-L-ornithyl)-L-ornithyl-2-aminotetradecanoyl-2-aminotetradecanoyl-2-aminotetradecanoylglycyl-L-prolyl-L-lysyl-L-lysyl-L-lysyl-L-arginyl-L-lysyl-L-valyl- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C121 H236 N34 O19
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

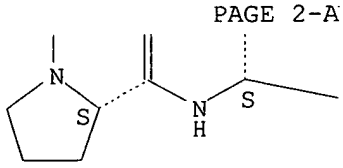
PAGE 1-A



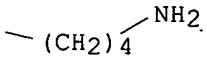
PAGE 1-B



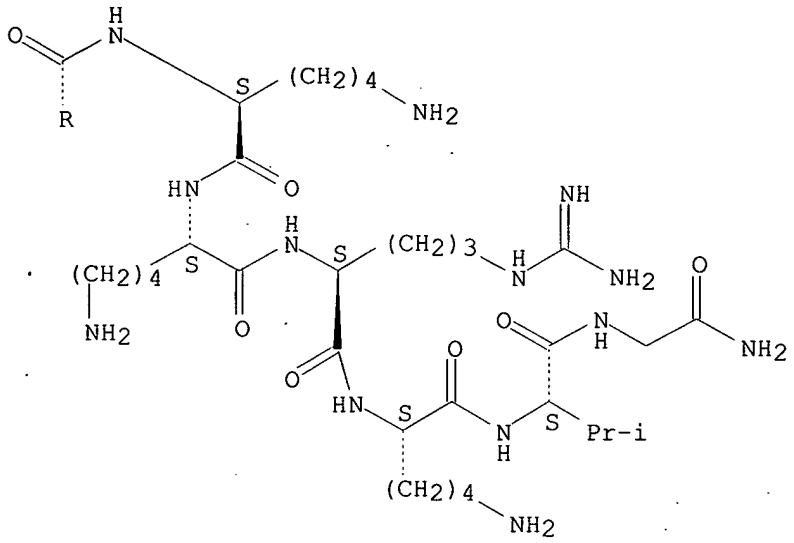
PAGE 2-A



PAGE 2-B



PAGE 3-A



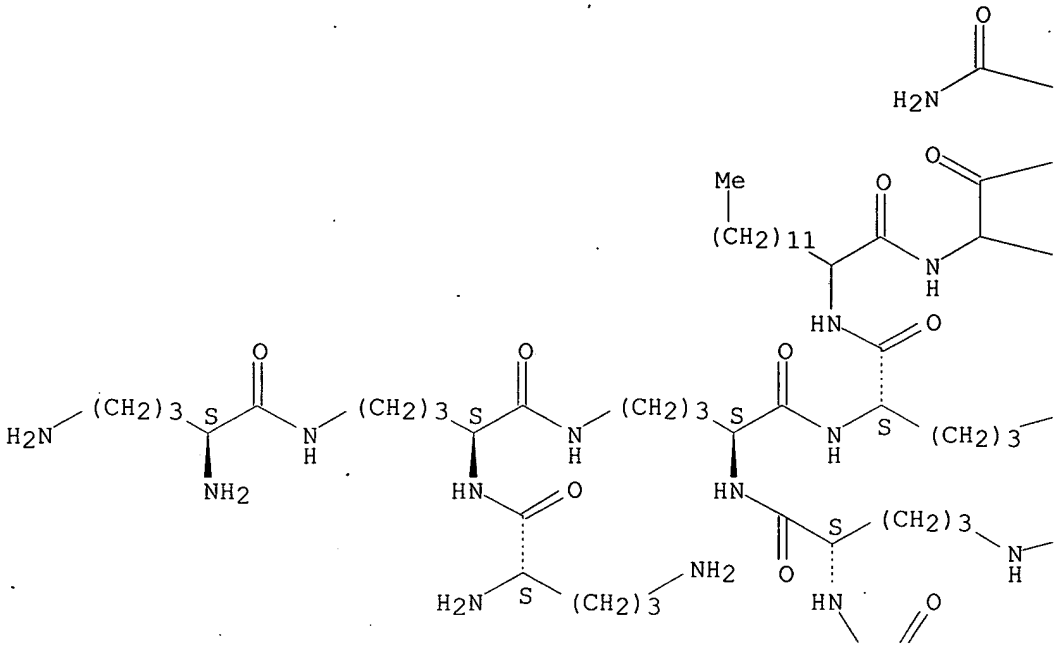
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 132:227244

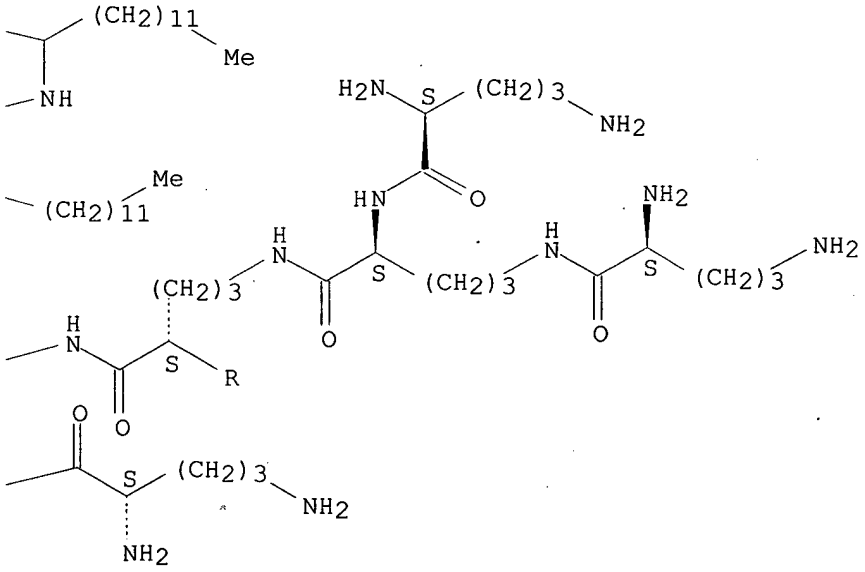
L2 ANSWER 11 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 261167-31-1 REGISTRY
CN Tetradecanamide, N2,N5-bis[N2,N5-bis(N2,N5-di-L-ornithyl-L-ornithyl)-L-ornithyl]-L-ornithyl-2-aminotetradecanoyl-2-aminotetradecanoyl-2-amino- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 10: PN: WO0016807 FIGURE: 2 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C117 H234 N34 O18
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

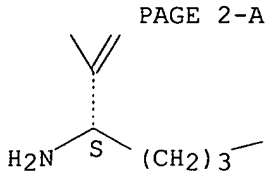
PAGE 1-A

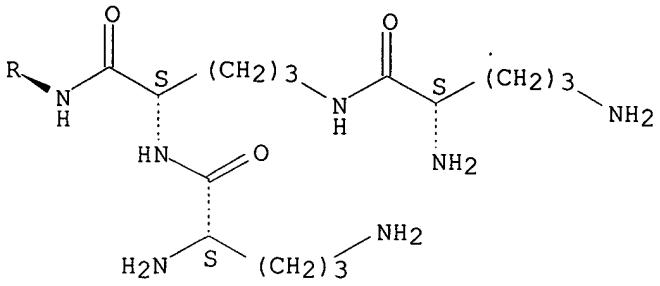


PAGE 1-B

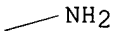


PAGE 2-A





PAGE 2-B



2 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

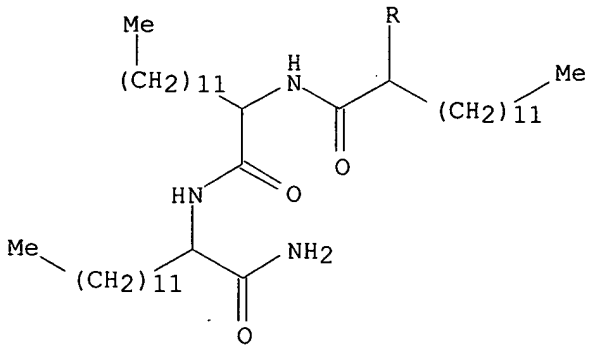
REFERENCE 1: 132:255952

REFERENCE 2: 132:227244

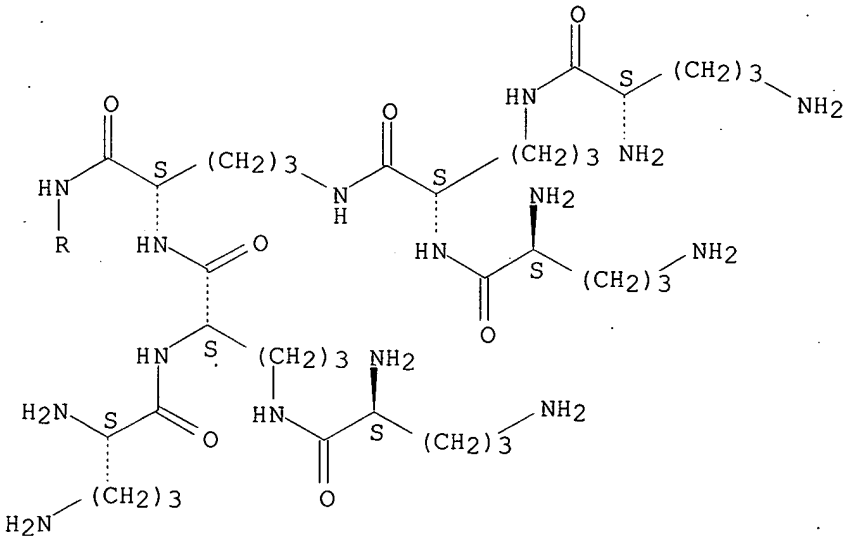
L2 ANSWER 12 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 261167-30-0 REGISTRY
CN Tetradecanamide, N2,N5-bis(N2,N5-di-L-ornithyl-L-ornithyl)-L-ornithyl-2-aminotetradecanoyl-2-aminotetradecanoyl-2-amino- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 9: PN: WO0016807 FIGURE: 2 claimed sequence
FS PROTEIN SEQUENCE; STEREOSEARCH
MF C77 H154 N18 O10
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A



2 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 132:255952

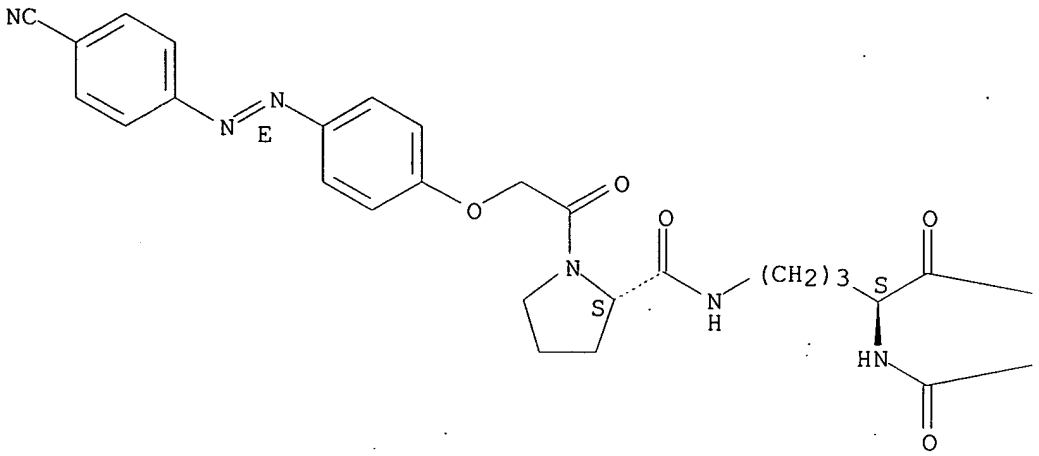
REFERENCE 2: 132:227244

L2 ANSWER 13 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 244785-60-2 REGISTRY
CN L-Ornithinamide, N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[1-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-L-prolyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[1-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-L-prolyl]-L-ornithyl]-L-ornithyl]-L-ornithylglycyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH

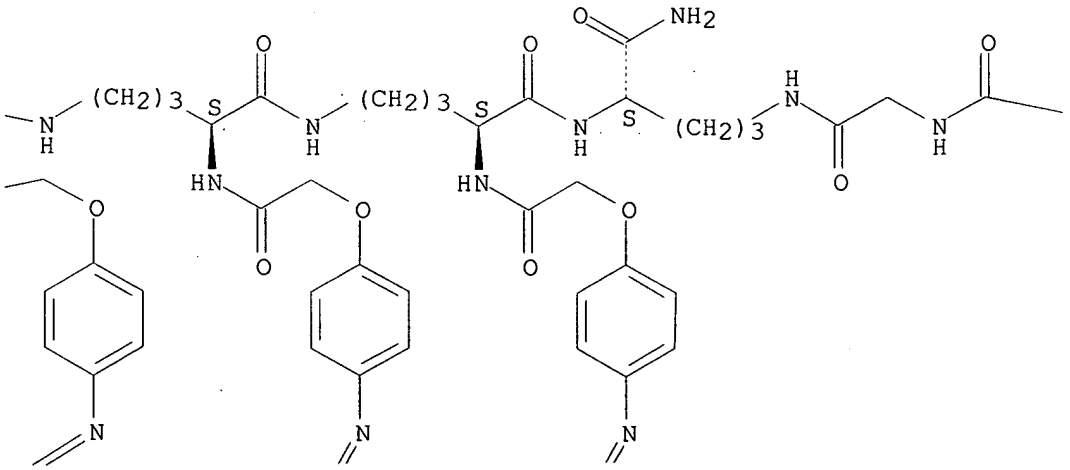
MF C167 H162 N42 O26
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.
Double bond geometry as shown.

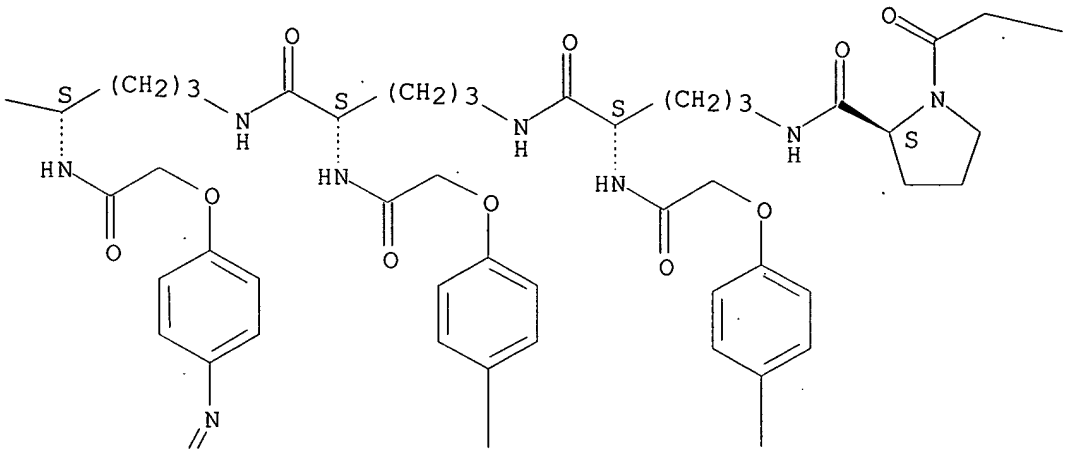
PAGE 1-A



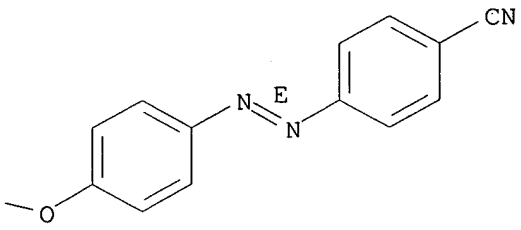
PAGE 1-B



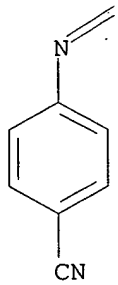
PAGE 1-C



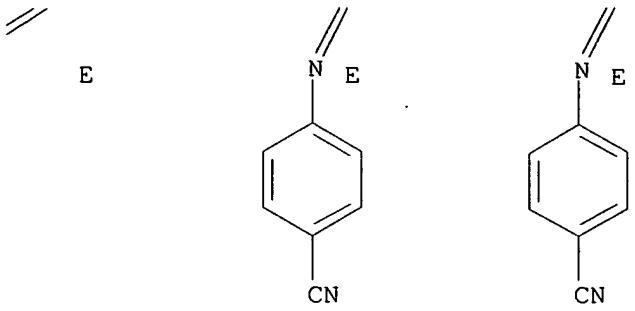
PAGE 1-D



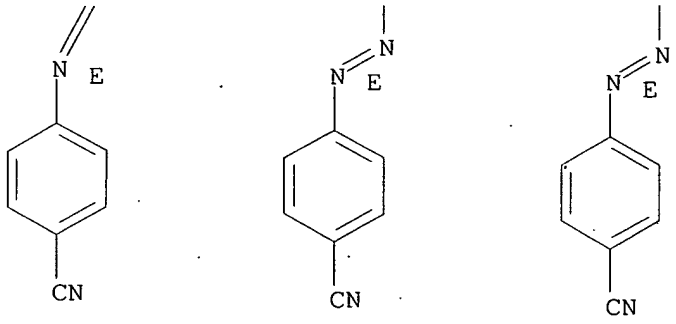
PAGE 2-A



PAGE 2-B



PAGE 2-C



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

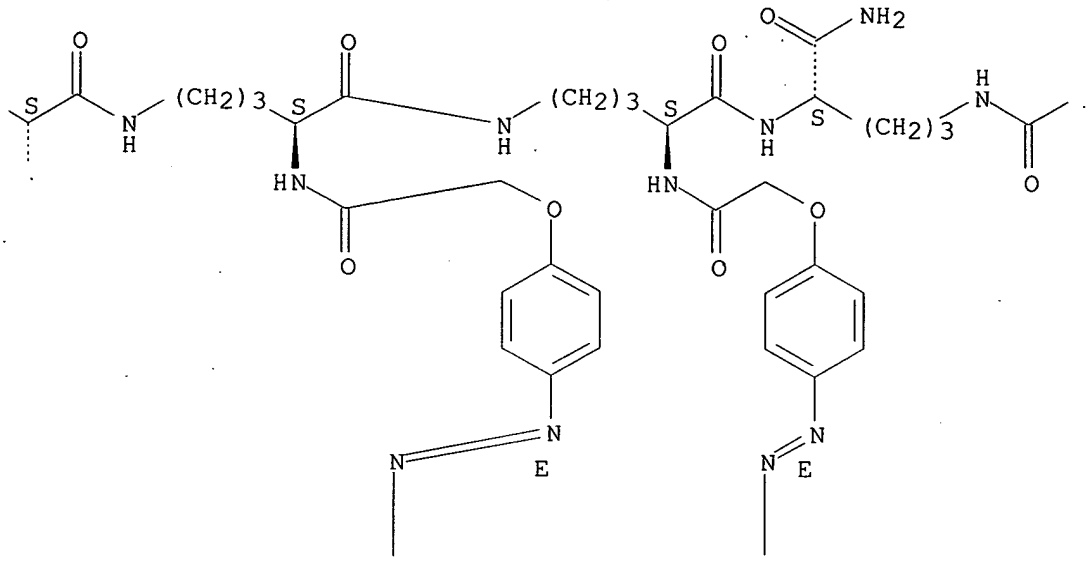
REFERENCE 1: 131:257847

L2 ANSWER 14 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 244785-58-8 REGISTRY
CN L-Ornithinamide, N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-L-alanyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-L-alanyl]-L-ornithyl]-L-ornithyl]-L-ornithylglycyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C163 H158 N42 O26
SR CA
LC STN Files: CA, CAPLUS

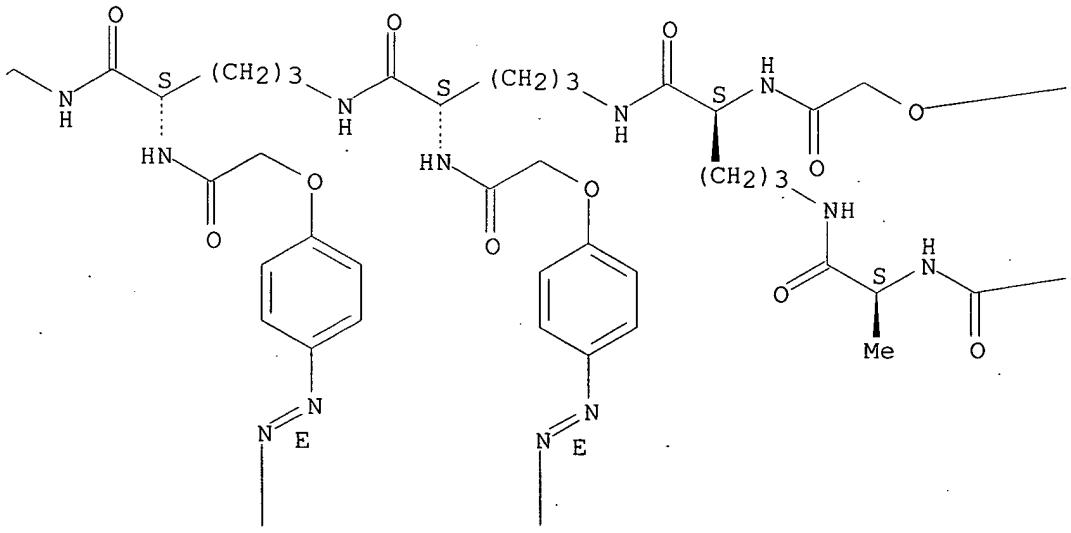
Absolute stereochemistry.
Double bond geometry as shown.

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

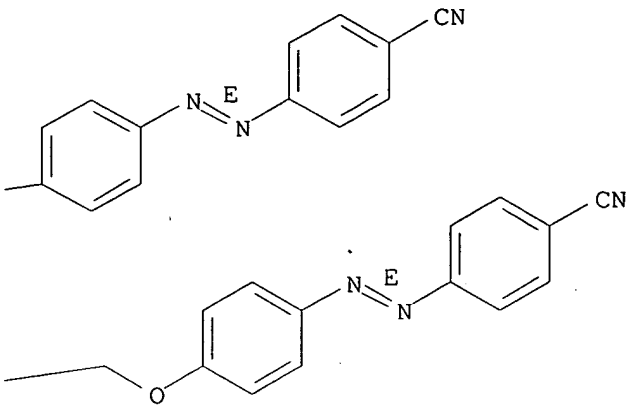
PAGE 1-B



PAGE 1-C

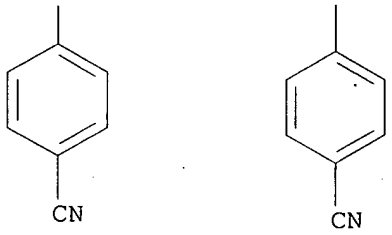


PAGE 1-D



PAGE 2-B

PAGE 2-C



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 131:257847

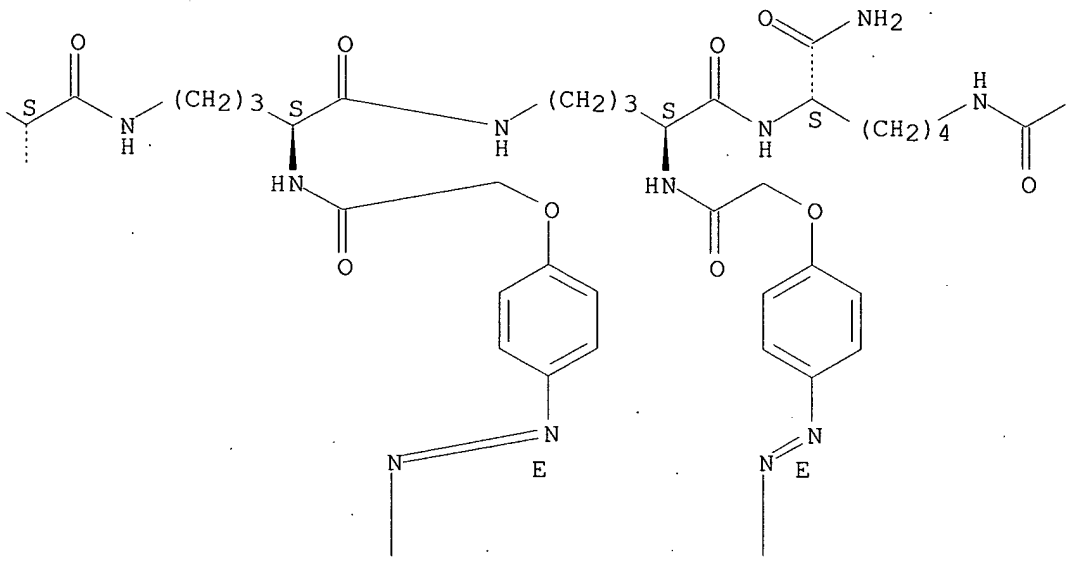
L2 ANSWER 15 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 244785-46-4 REGISTRY
CN L-Lysinamide, N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-N6-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithylglycyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH

MF C162 H156 N42 O26
SR CA
LC STN Files: CA, CAPLUS

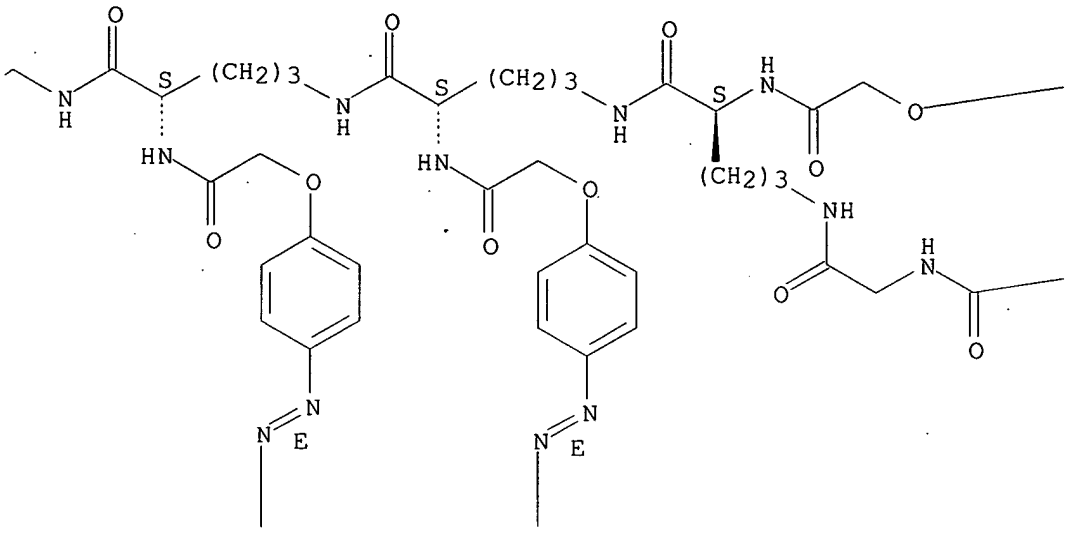
Absolute stereochemistry.
Double bond geometry as shown.

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

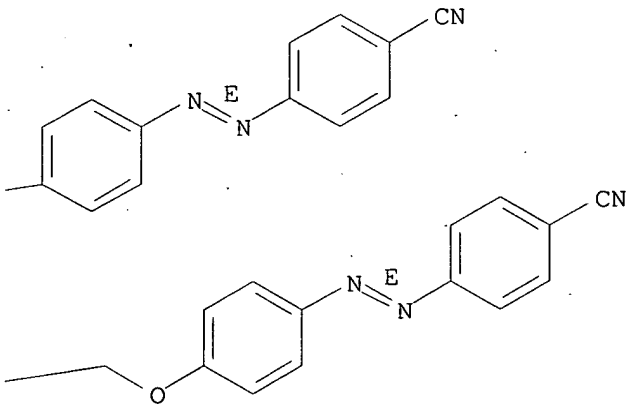
PAGE 1-B



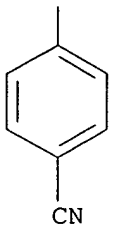
PAGE 1-C

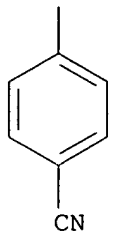


PAGE 1-D



PAGE 2-B





1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

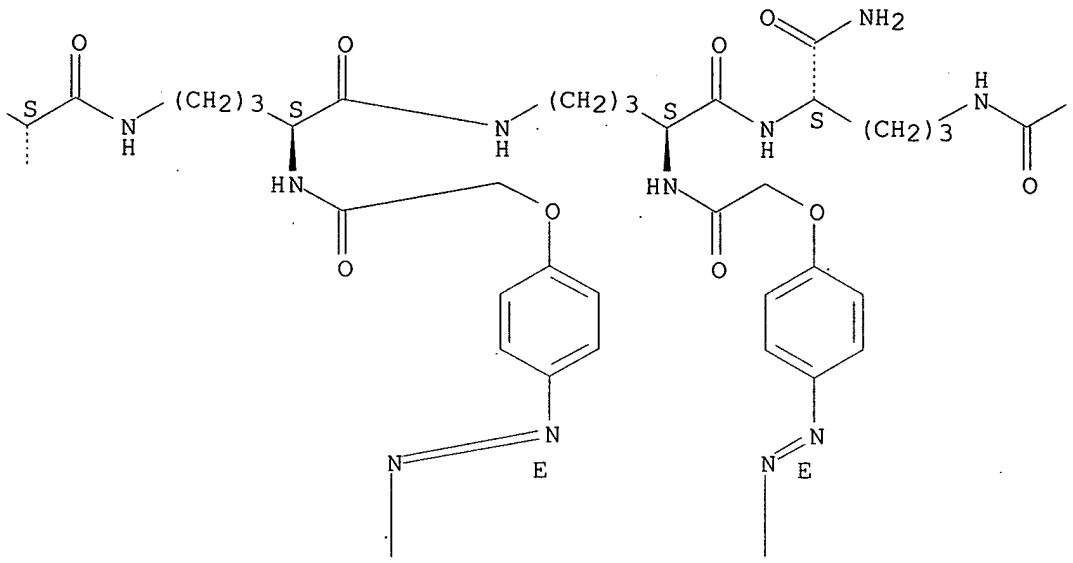
REFERENCE 1: 131:257847

L2 ANSWER 16 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 244785-45-3 REGISTRY
CN L-Ornithinamide, N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithylglycyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C161 H154 N42 O26
SR CA
LC STN Files: CA, CAPLUS

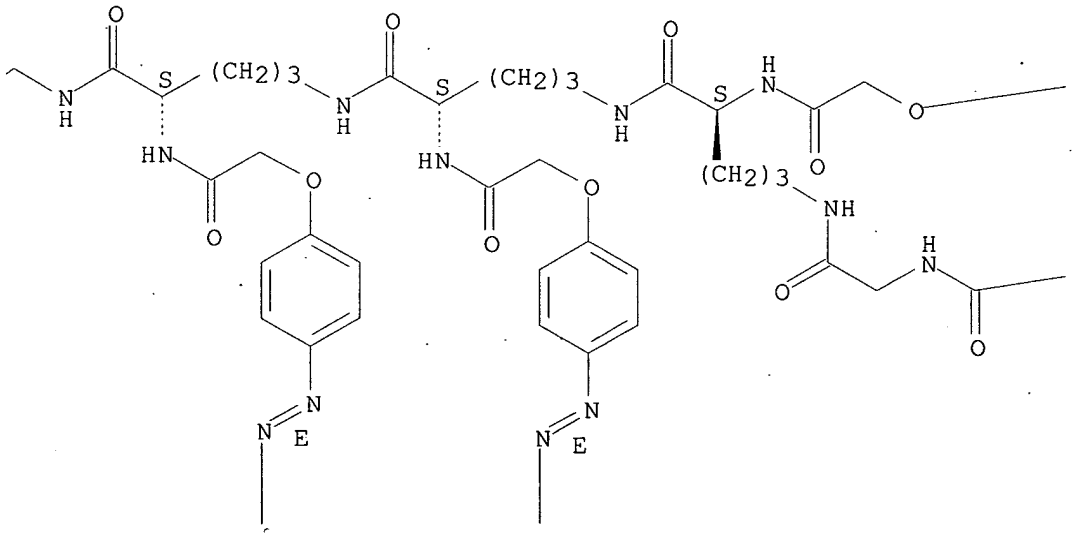
Absolute stereochemistry.
Double bond geometry as shown.

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

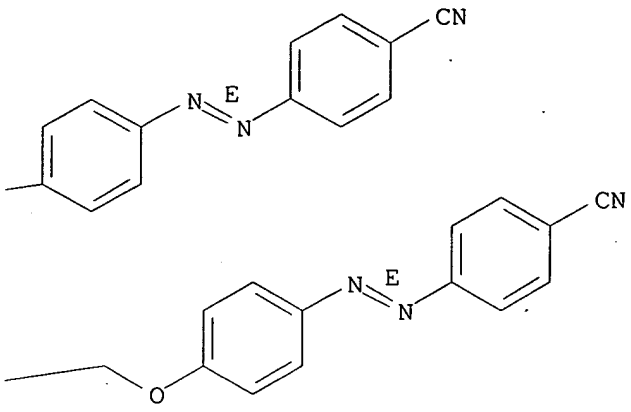
PAGE 1-B



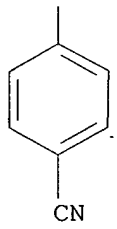
PAGE 1-C

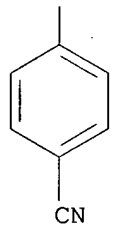


PAGE 1-D

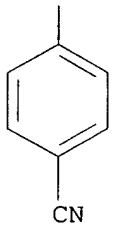


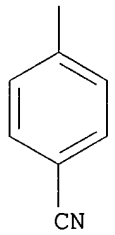
PAGE 2-B





PAGE 2-C





1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

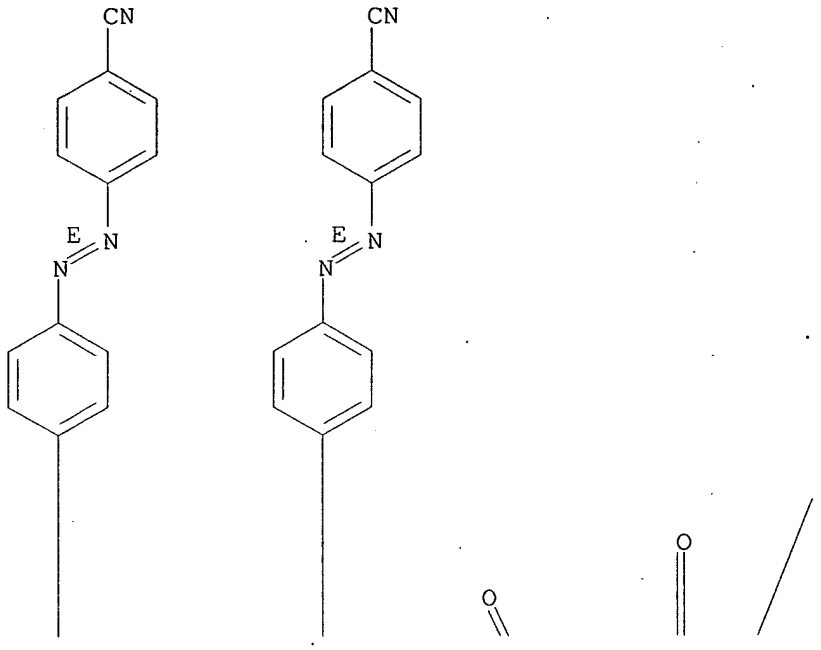
REFERENCE 1: 131:257847

L2 ANSWER 17 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 244785-44-2 REGISTRY
CN Butanamide, N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-N4-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithylglycyl]-2,4-diamino-, (2S)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH

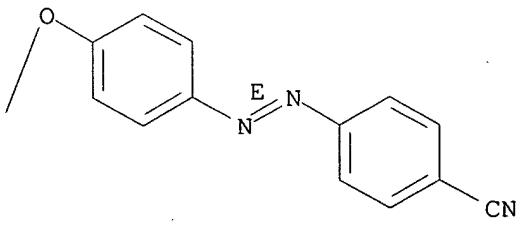
MF C160 H152 N42 O26
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.
Double bond geometry as shown.

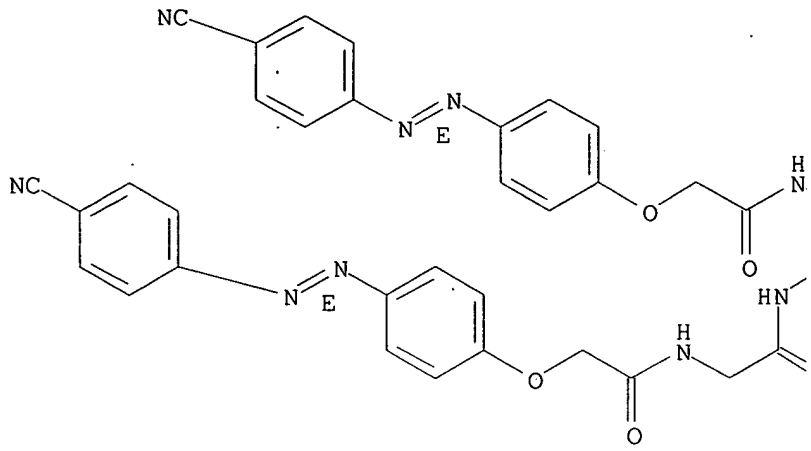
PAGE 1-C



PAGE 1-D



PAGE 2-A



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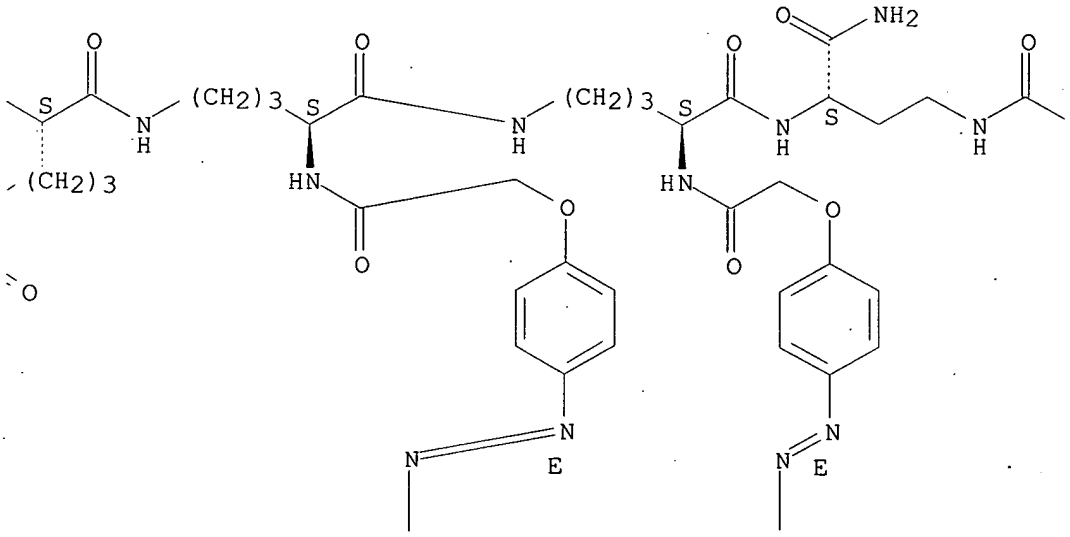
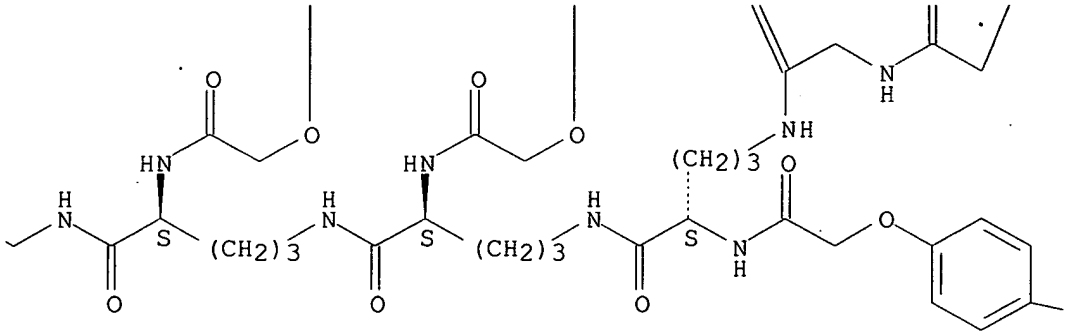
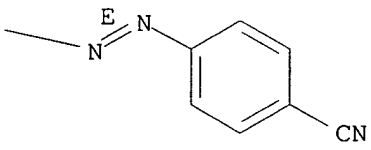


PAGE 2-C



PAGE 2-D



PAGE 3-B

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 131:257847

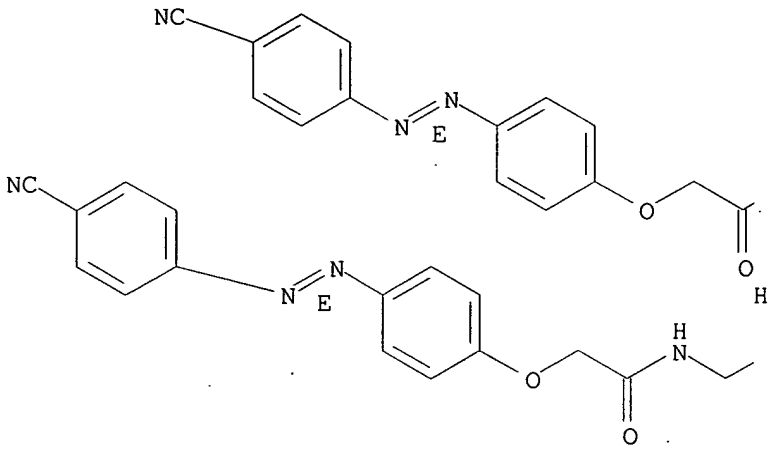
L2 ANSWER 18 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 244785-43-1 REGISTRY
CN L-Alaninamide, N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-3-[[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-

cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithylglycyl]amino]- (9CI) (CA INDEX NAME)

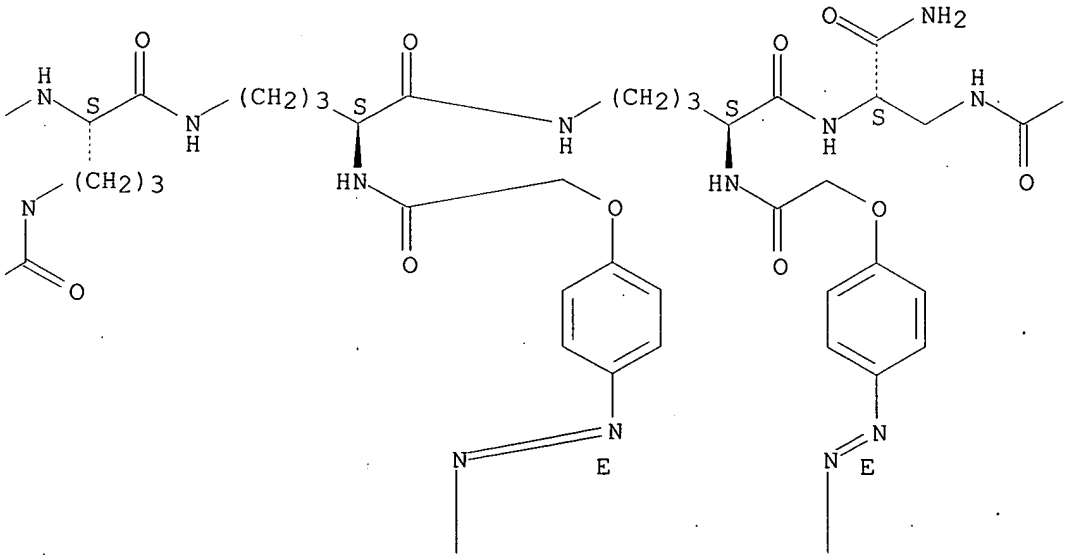
FS STEREOSEARCH
MF C159 H150 N42 O26
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.
Double bond geometry as shown.

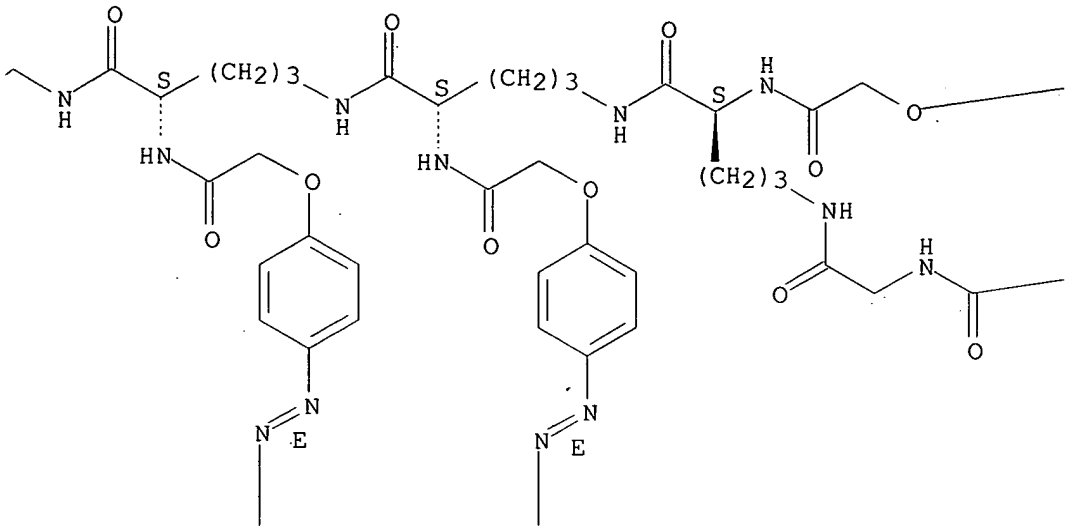
PAGE 1-A



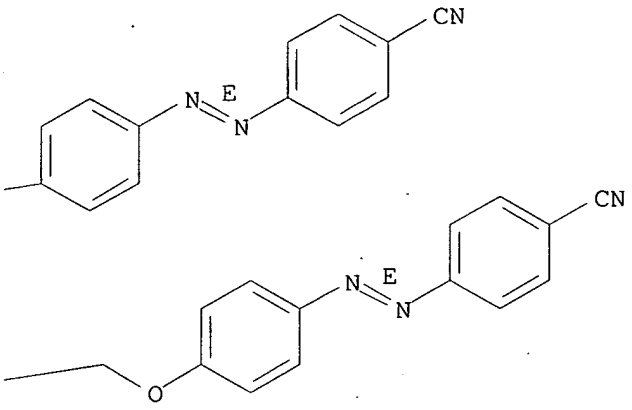
PAGE 1-B



PAGE 1-C

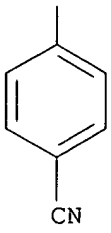


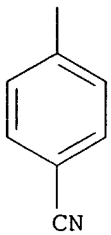
PAGE 1-D



PAGE 2-B

PAGE 2-C





1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

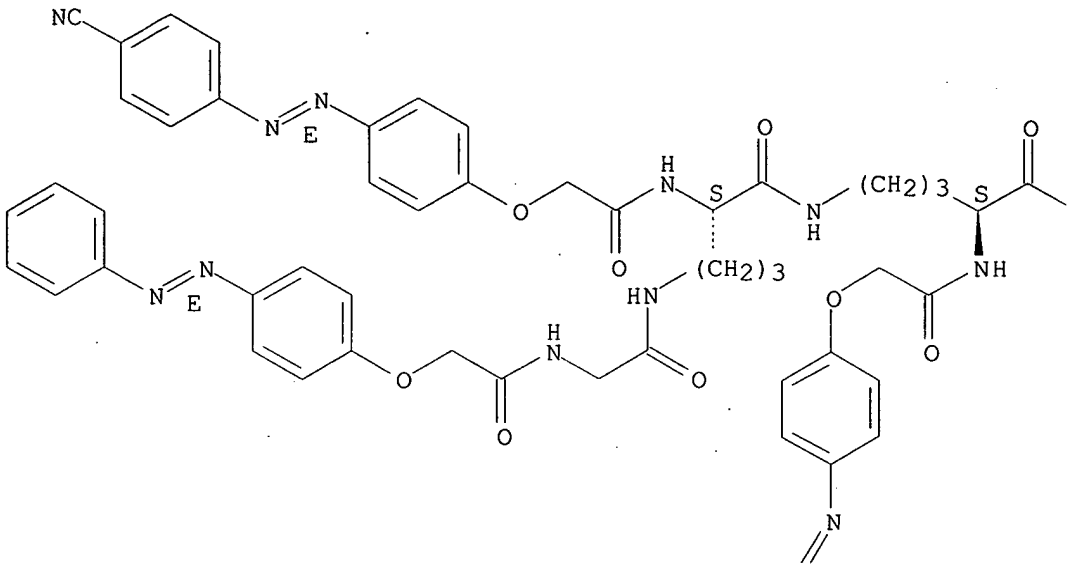
REFERENCE 1: 131:257847

L2 ANSWER 19 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 244785-37-3 REGISTRY
CN L-Ornithinamide, N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C117 H110 N30 O18
SR CA
LC STN Files: CA, CAPLUS

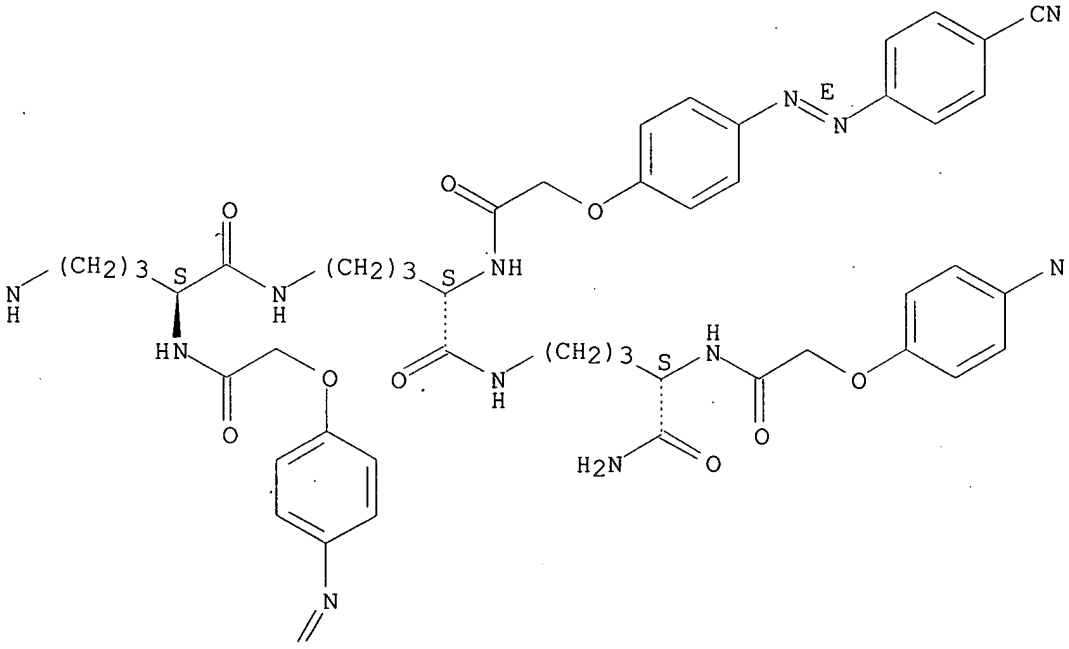
Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

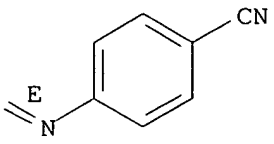
PAGE 1-B



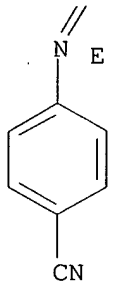
PAGE 1-C



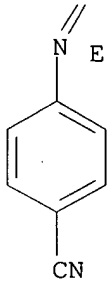
PAGE 1-D



PAGE 2-B



PAGE 2-C

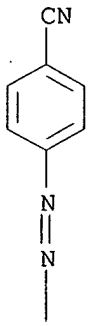


1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

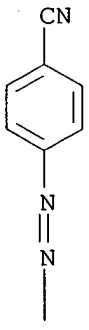
REFERENCE 1: 131:257847

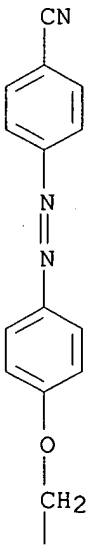
L2 ANSWER 20 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 244061-02-7 REGISTRY
CN 3,6,12,18,24,30-Hexaazapentatriacontan-35-amide, 1-[4-[(4-cyanophenyl)azo]phenoxy]-10,16,22,28,34-pentakis[[[4-[(4-cyanophenyl)azo]phenoxy]acetyl]amino]-2,5,11,17,23,29-hexaoxo- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C117 H110 N30 O18
SR CA
LC STN Files: CA, CAPLUS

PAGE 1-A

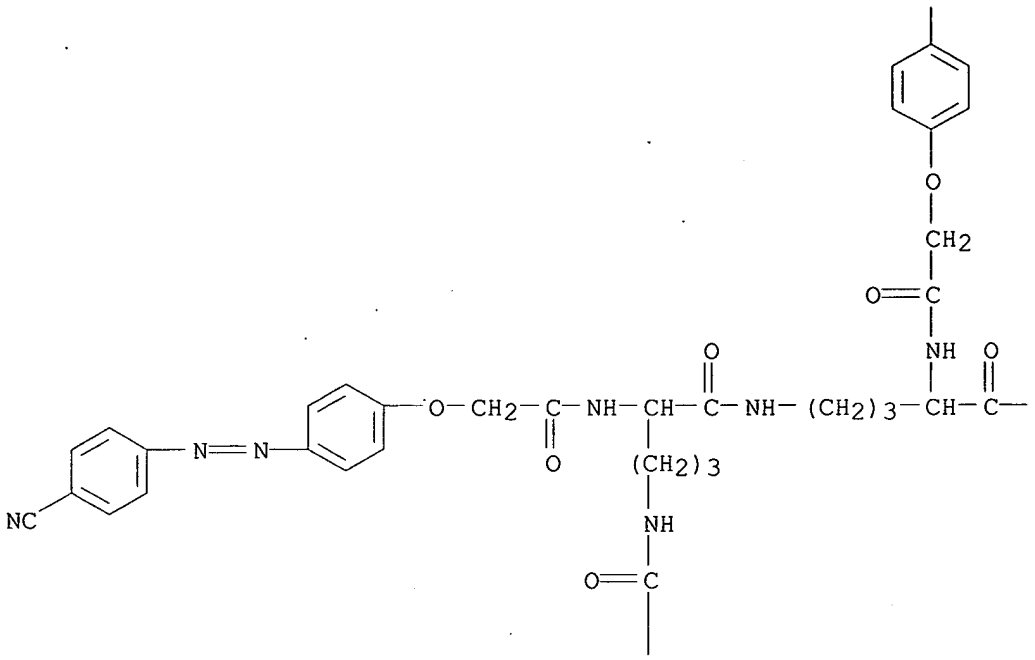


PAGE 1-B

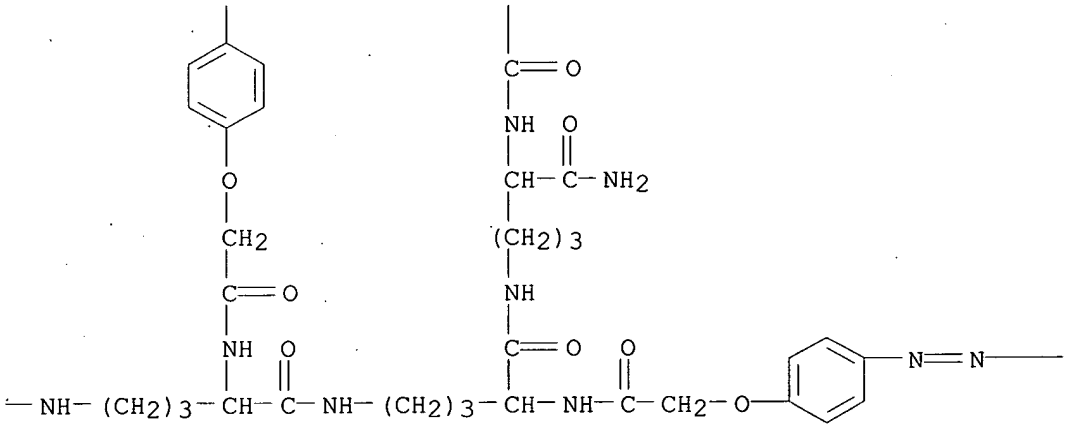




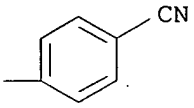
PAGE 2-A



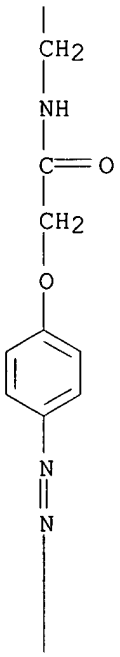
PAGE 2-B



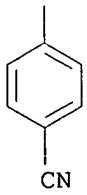
PAGE 2-C



PAGE 3-A



PAGE 4-A



1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 131:235657

L2 ANSWER 21 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 207803-05-2 REGISTRY
CN RNA, (A-A-A-A-A-A-A-A-A-A), complex with N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-acetyl-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl-L-lysinamide (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:
CN L-Lysinamide, N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-acetyl-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl-, complex with RNA (A-A-A-A-A-A-A-A-A-A) (1:1) (9CI)
FS NUCLEIC ACID SEQUENCE; STEREOSEARCH
MF C128 H177 N43 O42 . Unspecified
SR CA
LC STN Files: CA, CAPLUS

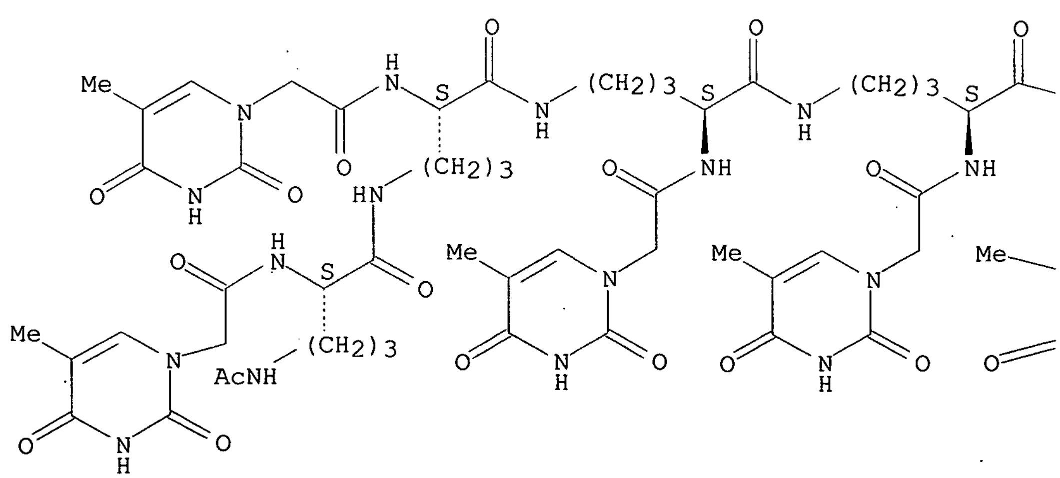
RELATED SEQUENCES AVAILABLE WITH SEQLINK

CM 1

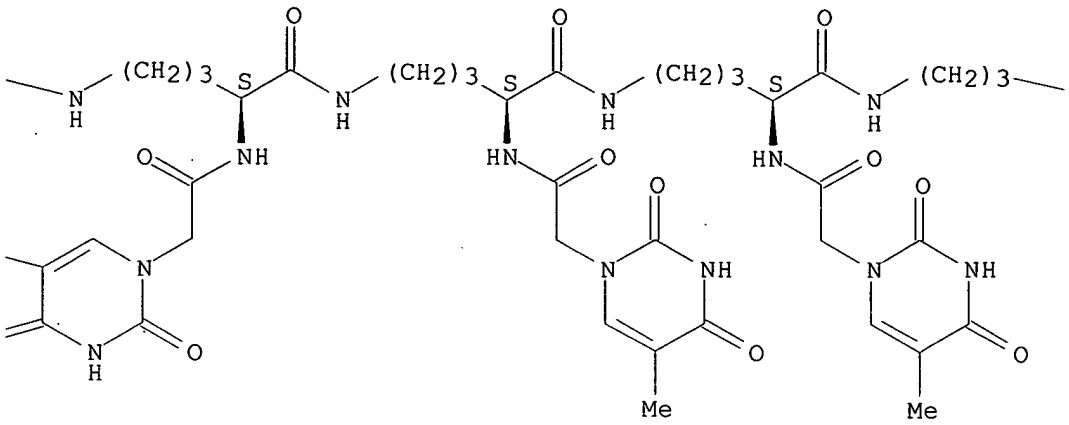
CRN 207597-64-6
CMF C128 H177 N43 O42

Absolute stereochemistry.

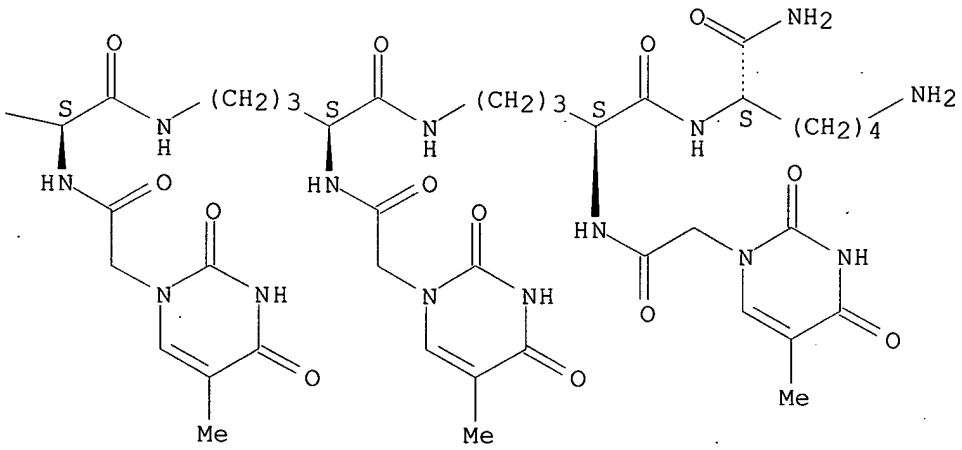
PAGE 1-A



PAGE 1-B



PAGE 1-C



CM 2

CRN 52206-42-5
CMF Unspecified
CCI MAN

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:16363

L2 ANSWER 22 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 207803-03-0 REGISTRY
CN RNA, (A-A-A-A-A-A-A-A-A-A), complex with N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-

[N5-[N5-acetyl-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl-L-lysinamide (1:1) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN L-Lysinamide, N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-acetyl-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl-, complex with RNA (A-A-A-A-A-A-A-A-A-A) (1:1) (9CI)

FS NUCLEIC ACID SEQUENCE; STEREOSEARCH

MF C128 H177 N43 O42 . Unspecified

SR CA

LC STN Files: CA, CAPLUS

RELATED SEQUENCES AVAILABLE WITH SEQLINK

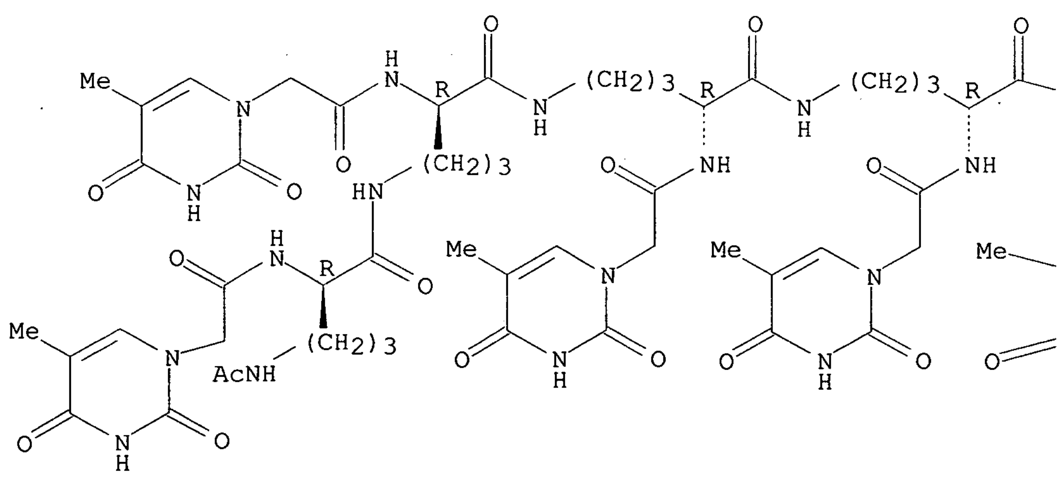
CM 1

CRN 207597-65-7

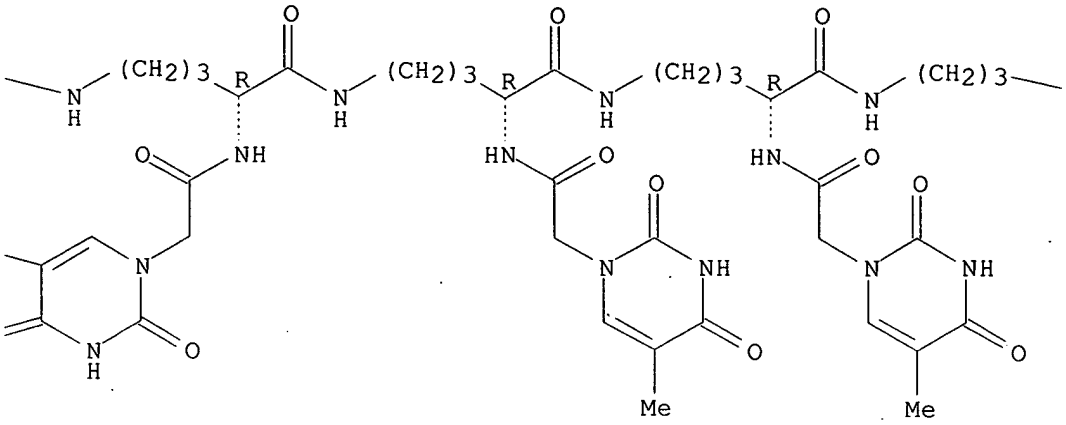
CMF C128 H177 N43 O42

Absolute stereochemistry.

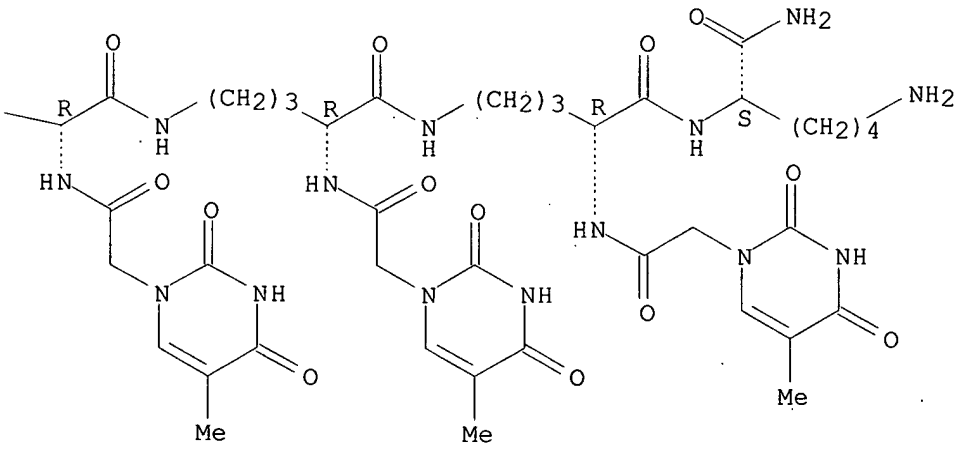
PAGE 1-A



PAGE 1-B



PAGE 1-C



CM 2

CRN 52206-42-5
CMF Unspecified
CCI MAN

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:16363

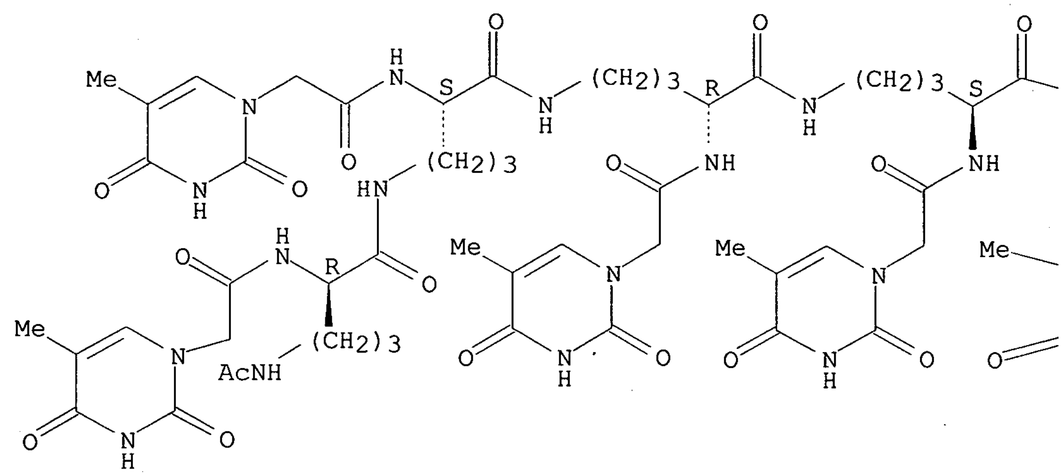
L2 ANSWER 23 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 207597-66-8 REGISTRY
CN L-Lysinamide, N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-acetyl-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-

dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-
dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-
dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-
dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-
dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-
dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-
dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-
dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl- (9CI)
(CA INDEX NAME)

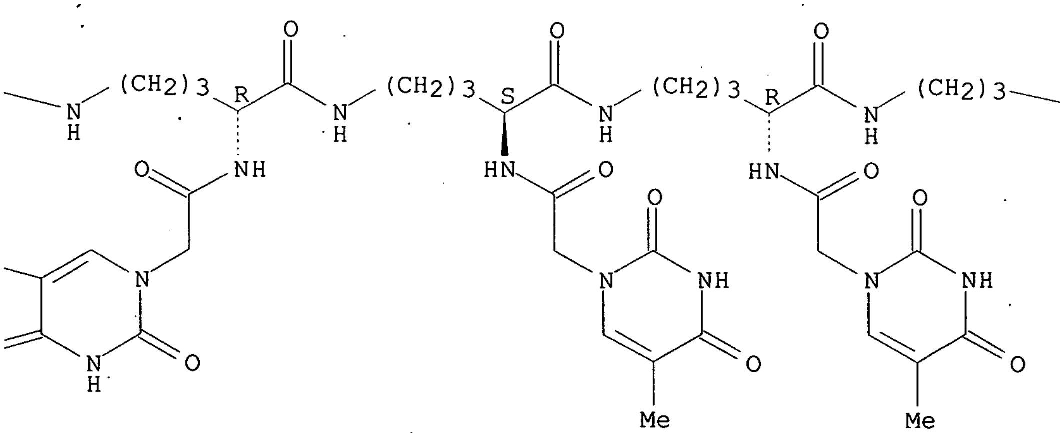
FS STEREOSEARCH
MF C128 H177 N43 O42
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

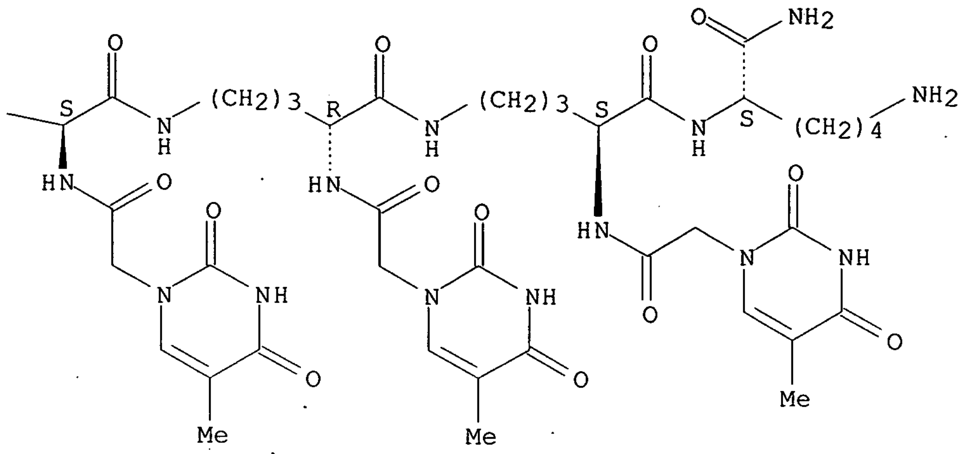
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

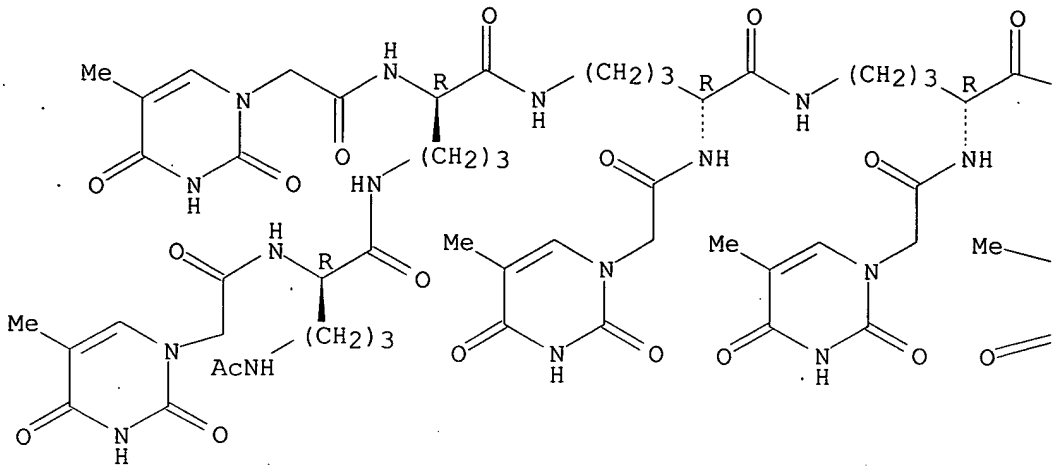
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:16363

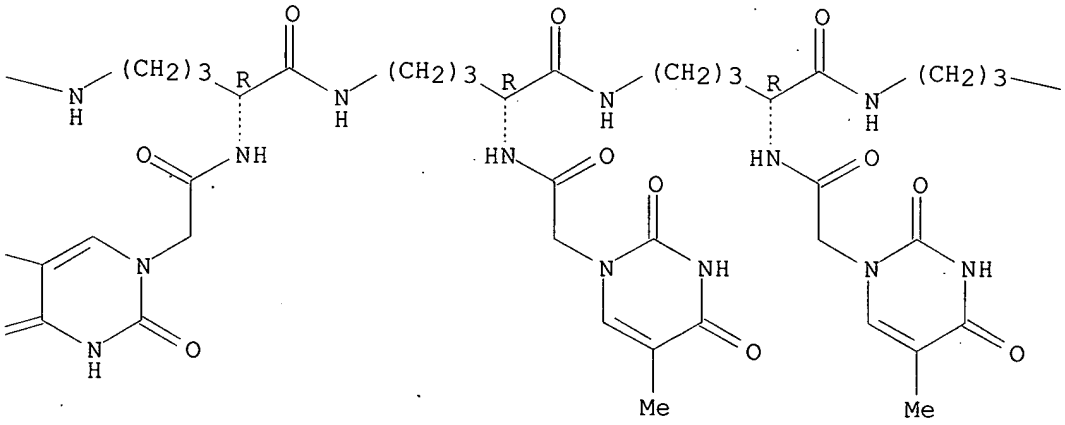
L2 ANSWER 24 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 207597-65-7 REGISTRY
CN L-Lysinamide, N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-acetyl-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-D-ornithyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C128 H177 N43 O42
CI COM
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

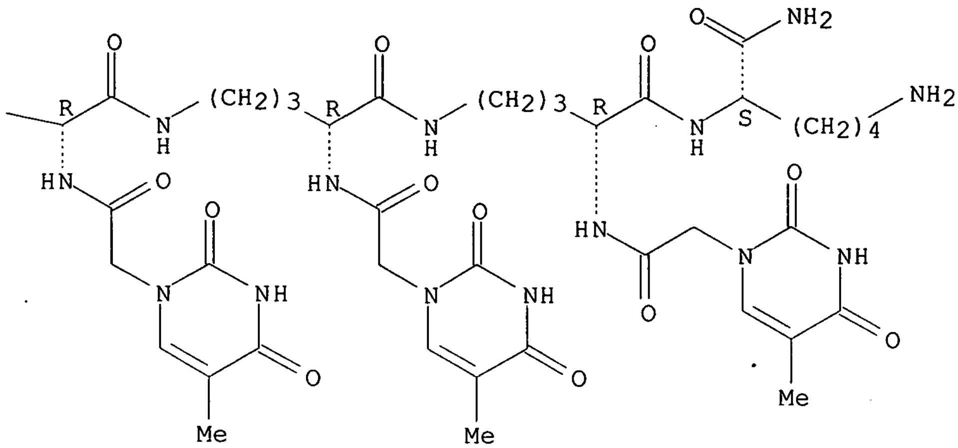
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

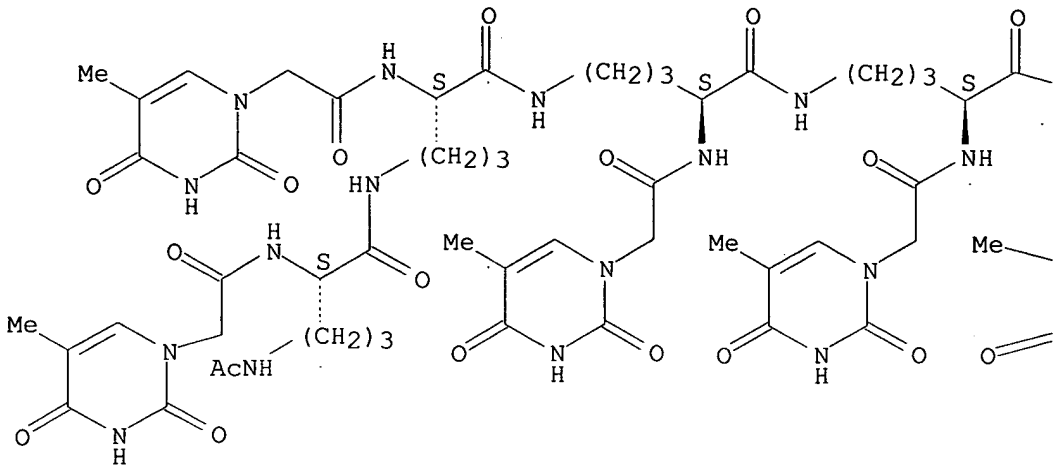
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:16363

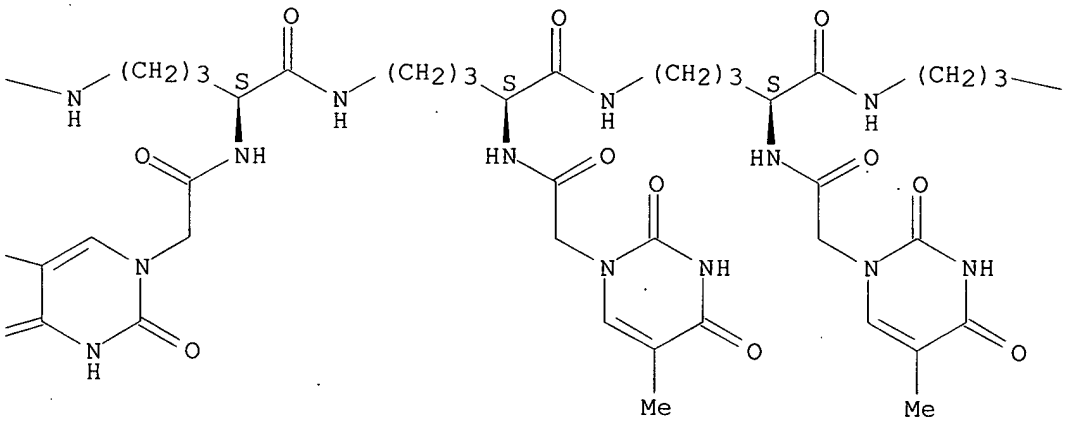
L2 ANSWER 25 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 207597-64-6 REGISTRY
CN L-Lysinamide, N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-acetyl-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C128 H177 N43 O42
CI COM
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

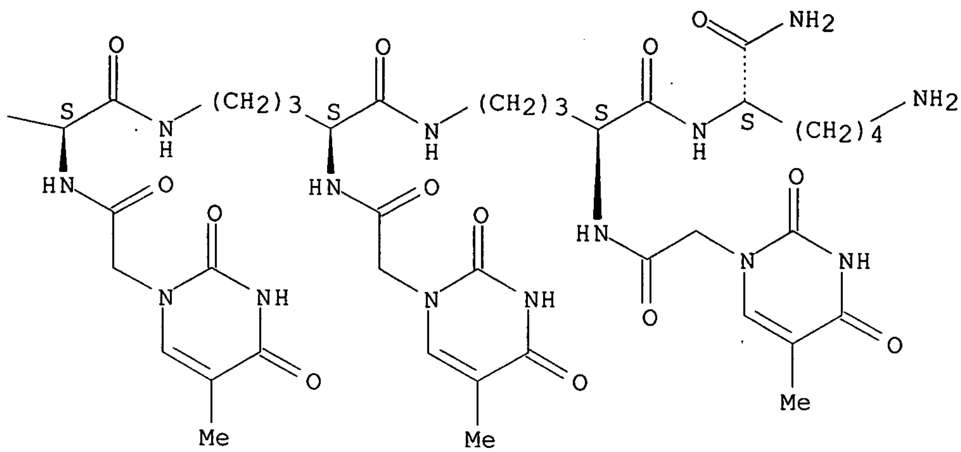
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

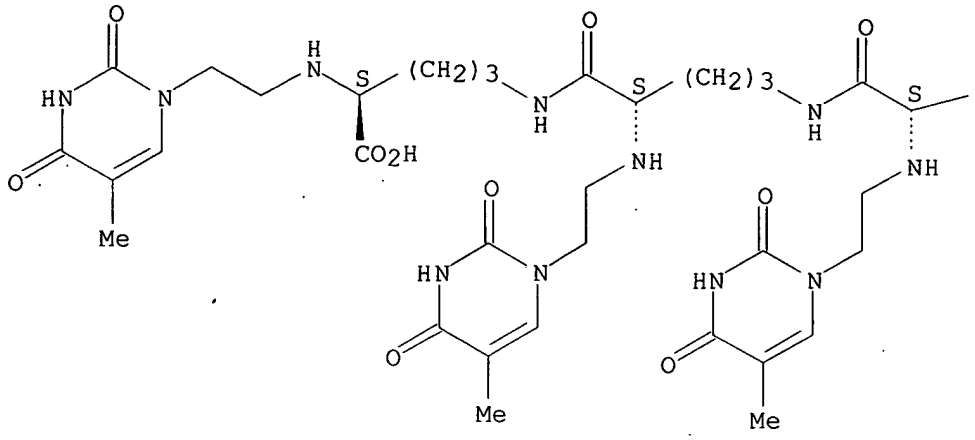
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 129:16363

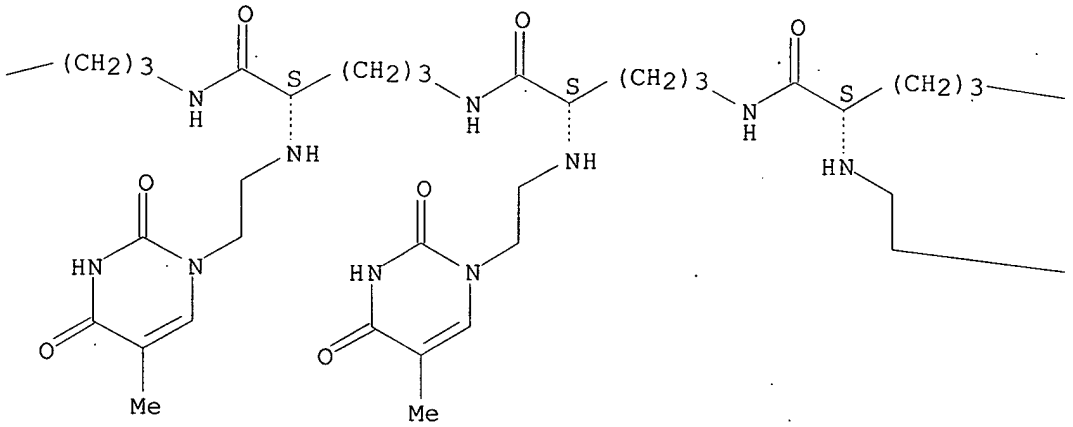
L2 ANSWER 26 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 202926-79-2 REGISTRY
CN L-Ornithine, N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-N5-[N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-N5-[N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-N5-[N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-N5-[N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-N5-[N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-N5-[N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-N5-[N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-N5-[N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-N5-[N2-[2-(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)ethyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C120 H182 N40 O31
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

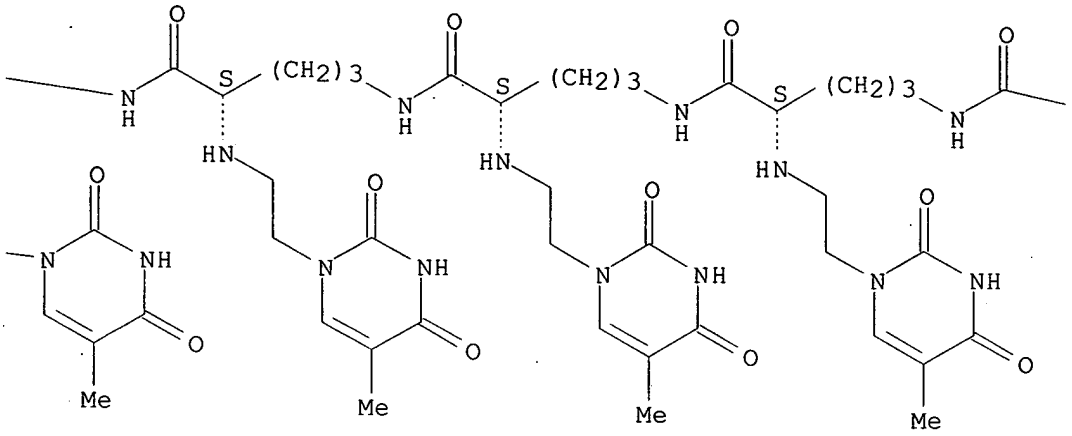
PAGE 1-A



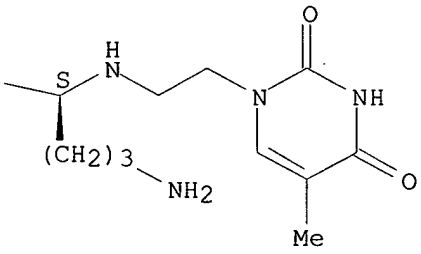
PAGE 1-B



PAGE 1-C



PAGE 1-D



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

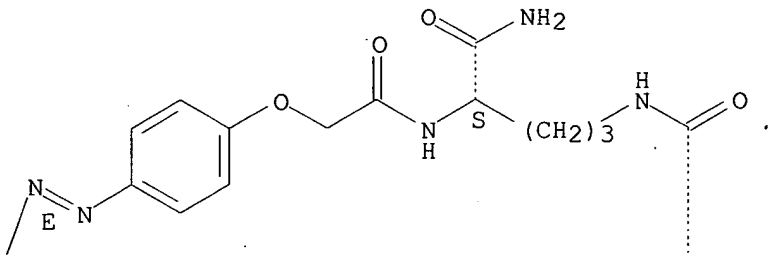
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 128:167703

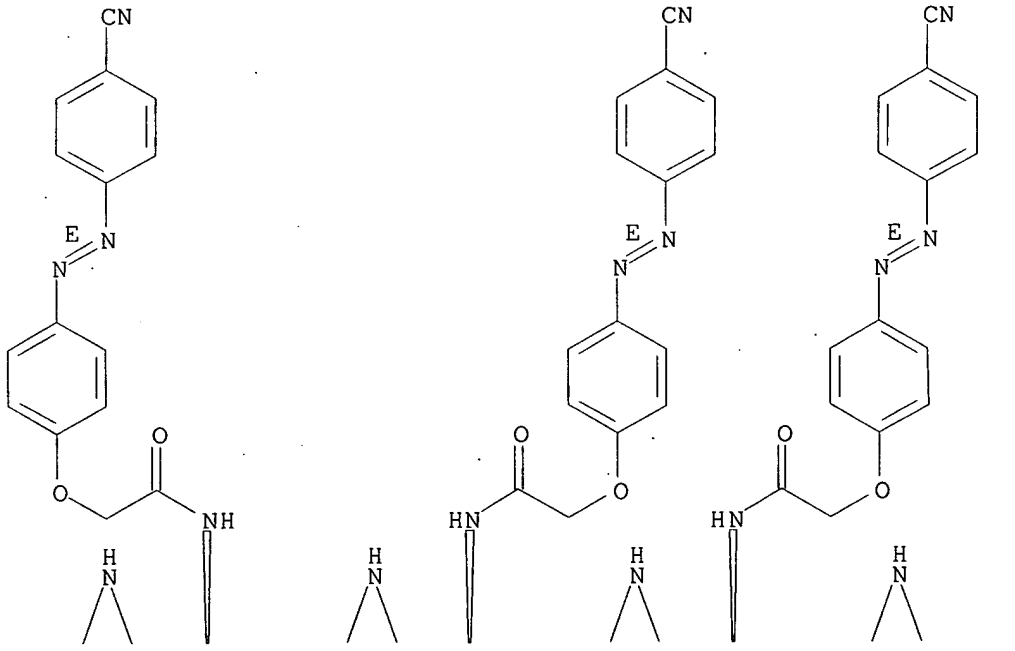
L2 ANSWER 27 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 184633-51-0 REGISTRY
CN L-Ornithinamide, N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C137 H129 N35 O21
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.
Double bond geometry as shown.

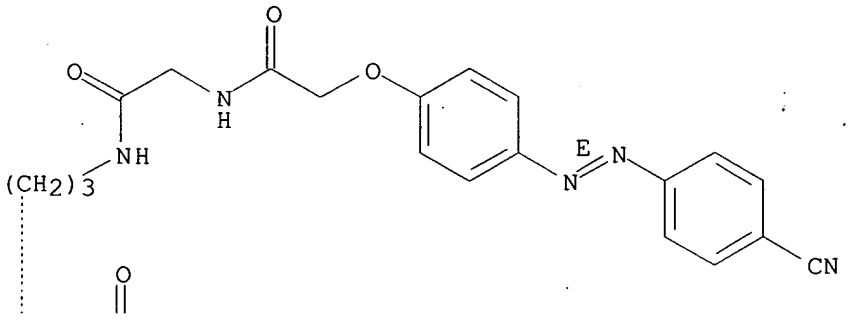
PAGE 1-A



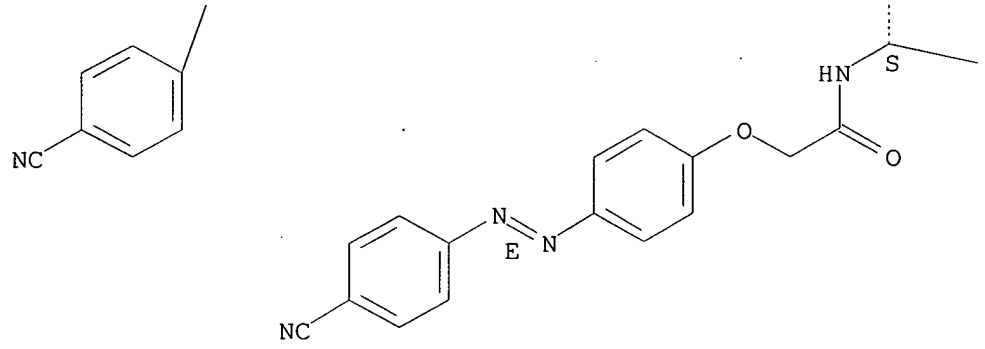
PAGE 1-B



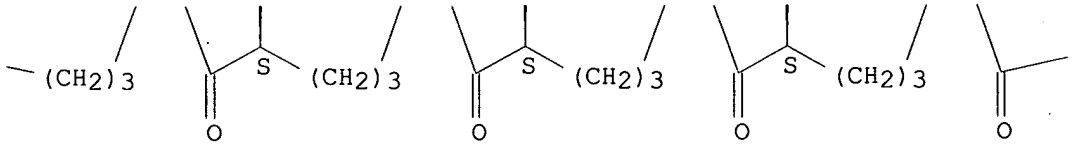
PAGE 1-C



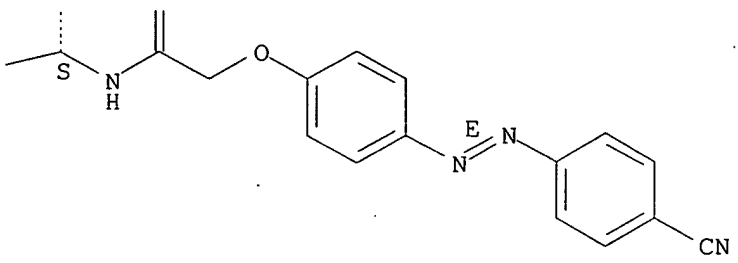
PAGE 2-A



PAGE 2-B



PAGE 2-C



3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 131:257847

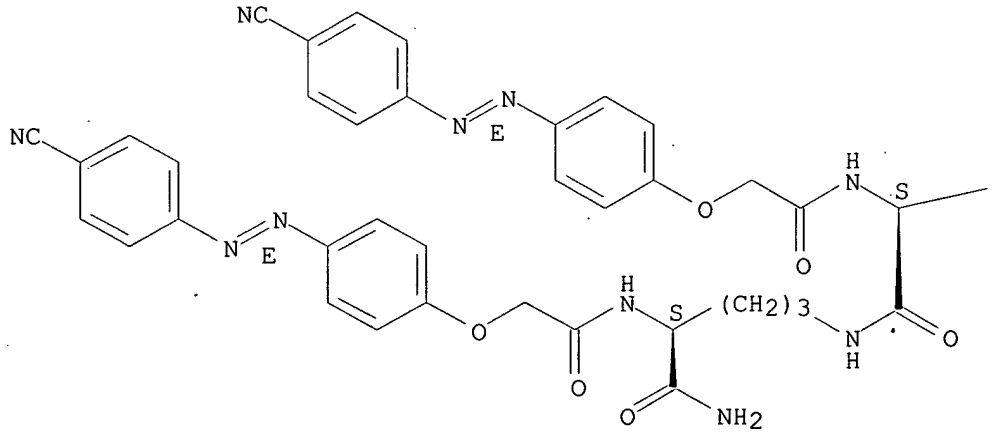
REFERENCE 2: 126:118198

REFERENCE 3: 126:39584

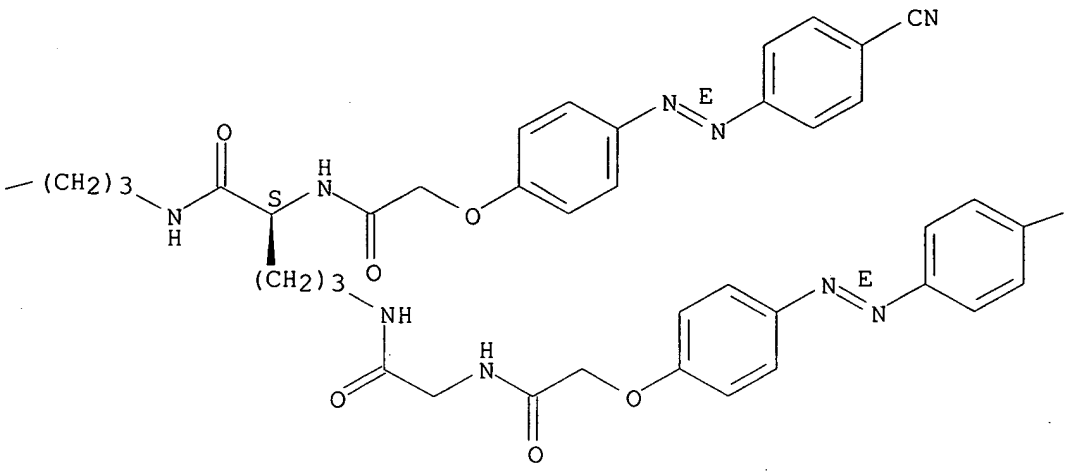
L2 ANSWER 28 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 184633-50-9 REGISTRY
CN L-Ornithinamide, N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N2-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]-N5-[N-[[4-[(1E)-(4-cyanophenyl)azo]phenoxy]acetyl]glycyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C77 H72 N20 O12
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A



PAGE 1-B



PAGE 1-C

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 131:257847

REFERENCE 2: 126:118198

REFERENCE 3: 126:39584

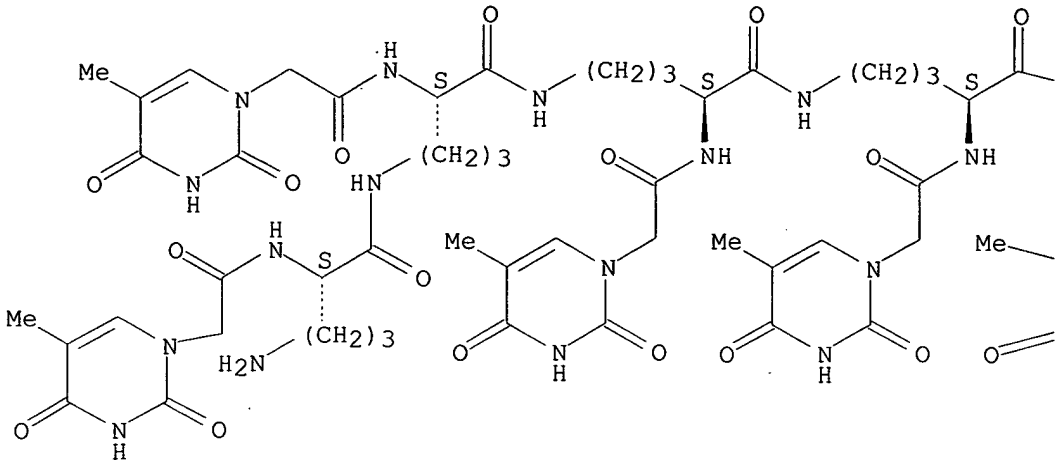
L2 ANSWER 29 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 178036-67-4 REGISTRY
CN DNA, d(A-A-A-A-A-A-A-A-A-A), compd. with N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-(N5-L-ornithyl-L-ornithyl)-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-L-lysinamide decaamide with 3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidineacetic acid (1:1) (9CI) (CA INDEX NAME)
FS NUCLEIC ACID SEQUENCE; STEREOSEARCH
DR 178095-25-5, 279694-95-0
MF C126 H175 N43 O41 . Unspecified
SR CA
LC STN Files: CA, CAPLUS

CM 1

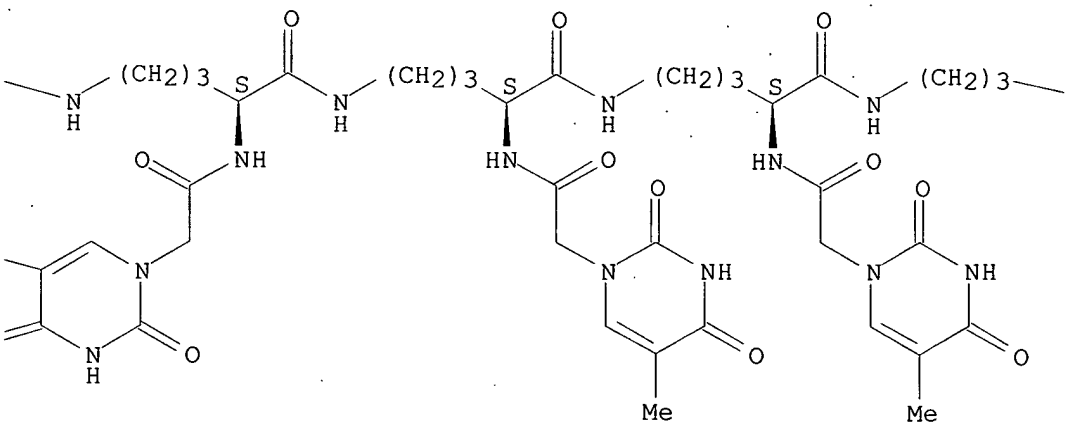
CRN 175431-23-9
CMF C126 H175 N43 O41

Absolute stereochemistry.

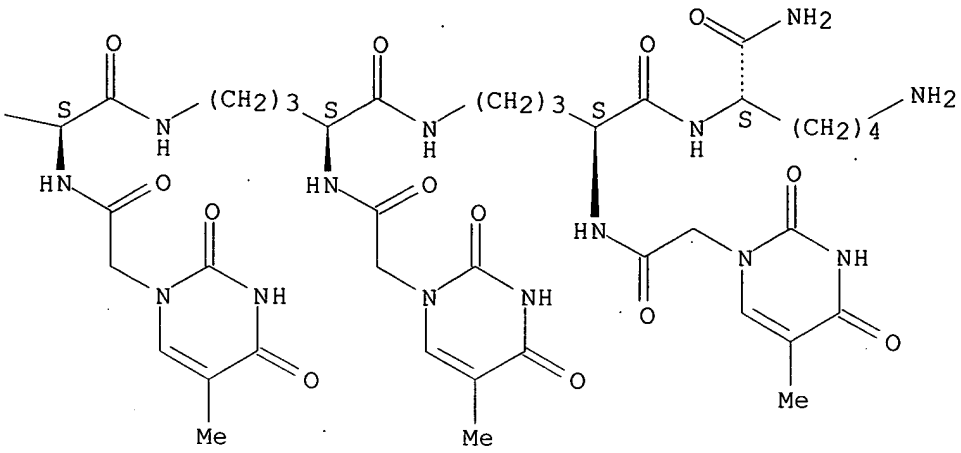
PAGE 1-A



PAGE 1-B



PAGE 1-C



CM 2

CRN 55508-40-2
CMF Unspecified
CCI MAN

RELATED SEQUENCES AVAILABLE WITH SEQLINK

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***
3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 133:89771

REFERENCE 2: 125:59113

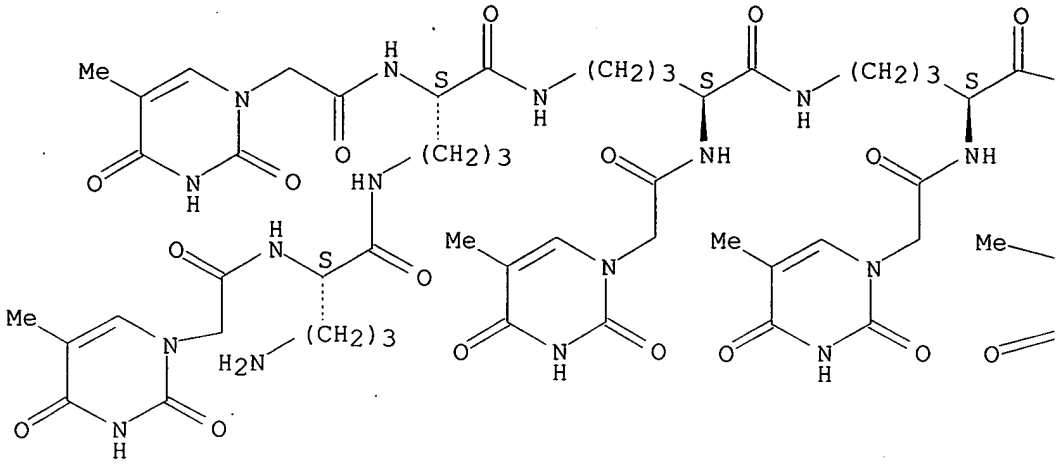
L2 ANSWER 30 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 177913-36-9 REGISTRY
CN 5'-Adenylic acid, homopolymer, complex with N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-(N5-L-ornithyl-L-ornithyl)-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-L-lysinamide decaamide with 3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidineacetic acid (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN L-Lysinamide, N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-(N5-L-ornithyl-L-ornithyl)-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-, decaamide with 3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidineacetic acid, complex with 5'-adenylic acid homopolymer (1:1) (9CI)
FS STEREOSEARCH
MF C126 H175 N43 O41 . 1/2 (C10 H14 N5 O7 P)x
PCT Polynucleotide
SR CA
LC STN Files: CA, CAPLUS

CM 1

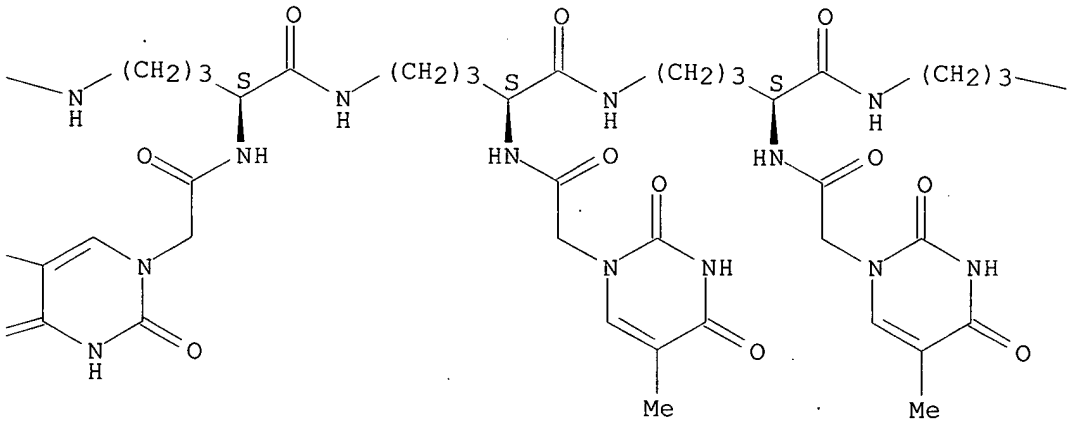
CRN 175431-23-9
CMF C126 H175 N43 O41

Absolute stereochemistry.

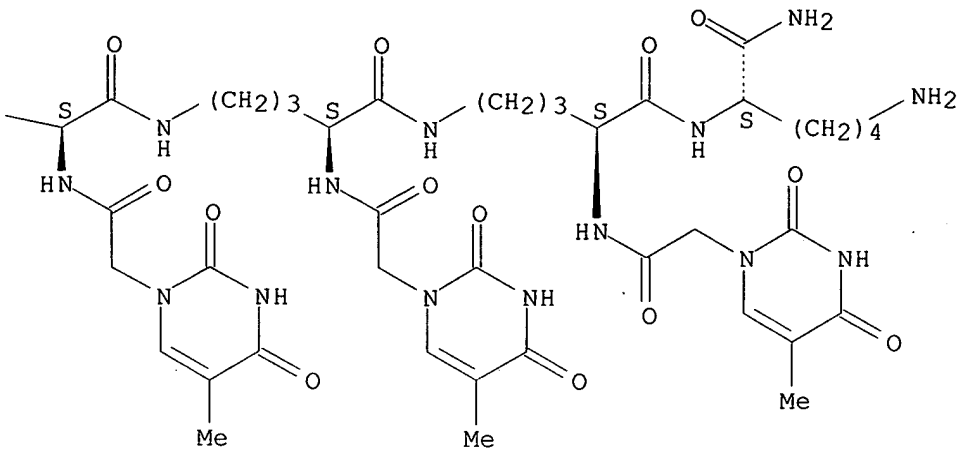
PAGE 1-A



PAGE 1-B



PAGE 1-C



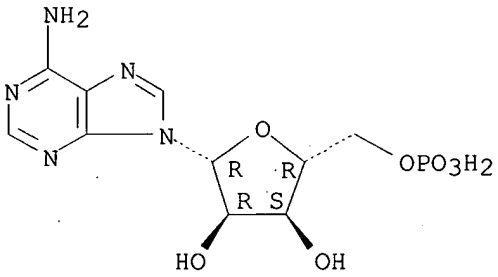
CM 2

CRN 24937-83-5
CMF (C10 H14 N5 O7 P)x
CCI PMS

CM 3

CRN 61-19-8
CMF C10 H14 N5 O7 P

Absolute stereochemistry.



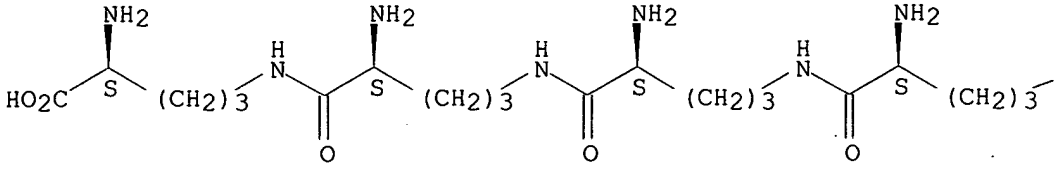
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 125:59113

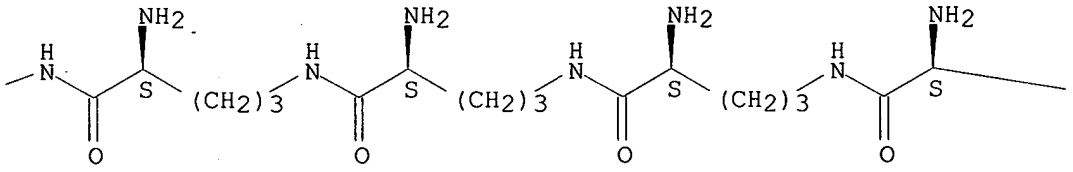
L2 ANSWER 31 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 176390-30-0 REGISTRY
CN L-Ornithine, N5-[N5-[N5-[N5-[N5-[N5-(N5-L-ornithyl-L-ornithyl)-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C40 H82 N16 O9
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

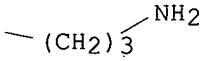
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

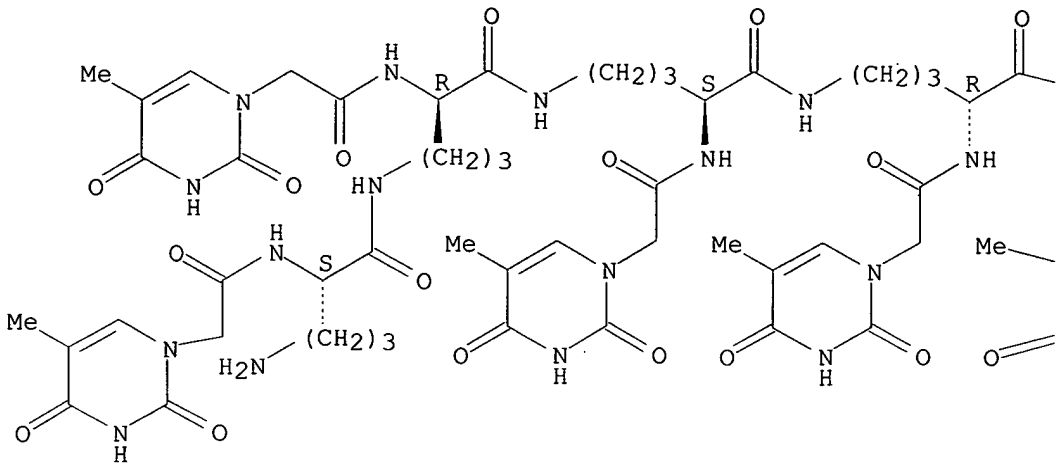
REFERENCE 1: 125:2444

REFERENCE 2: 124:308720

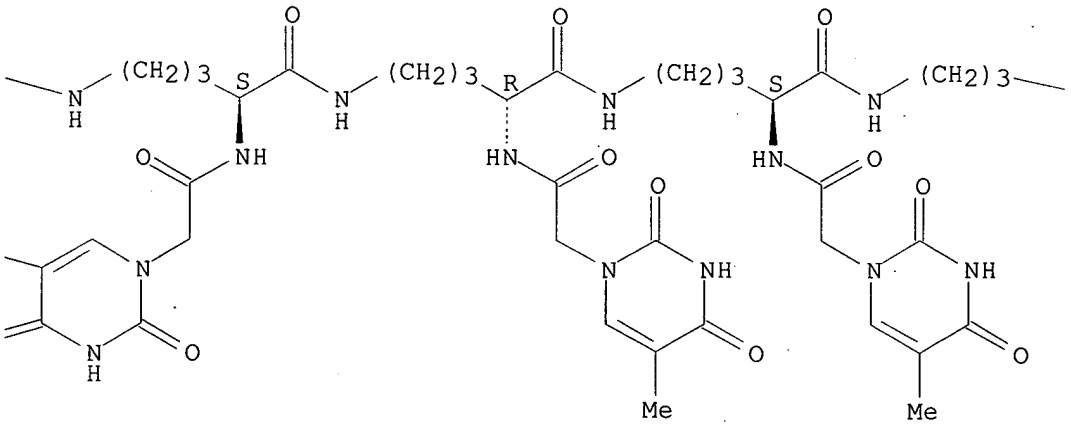
L2 ANSWER 32 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 175431-26-2 REGISTRY
CN D-Lysinamide, N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-(N5-L-ornithyl-D-ornithyl)-L-ornithyl]-D-ornithyl]-L-ornithyl]-D-ornithyl]-L-ornithyl]-D-ornithyl]-L-ornithyl]-D-ornithyl-, decaamide with 3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidineacetic acid (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C126 H175 N43 O41
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

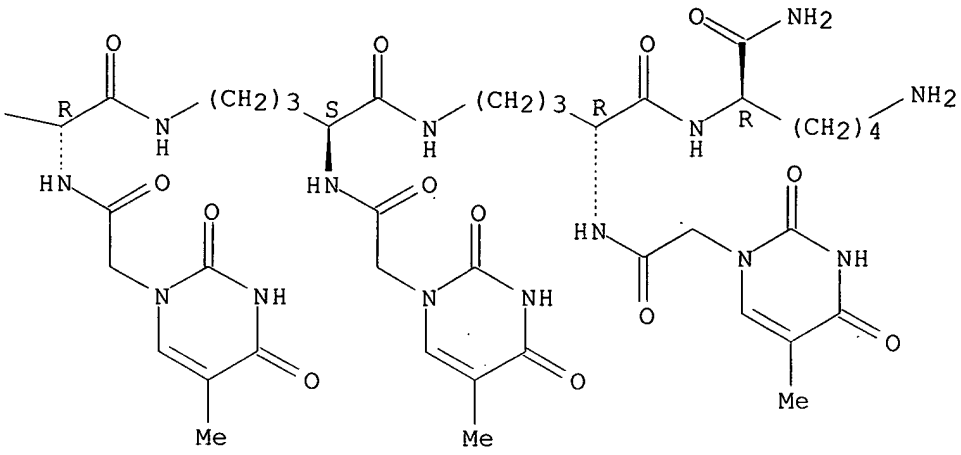
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

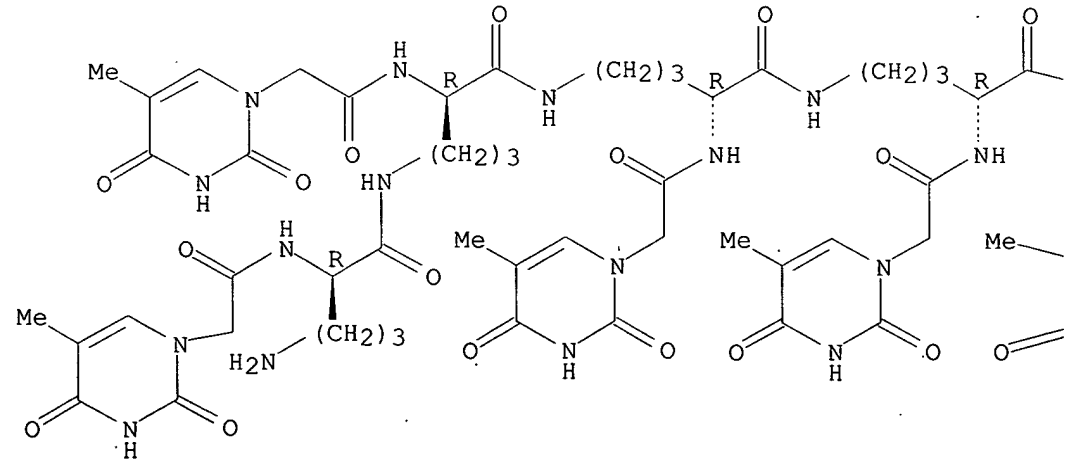
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 124:290226

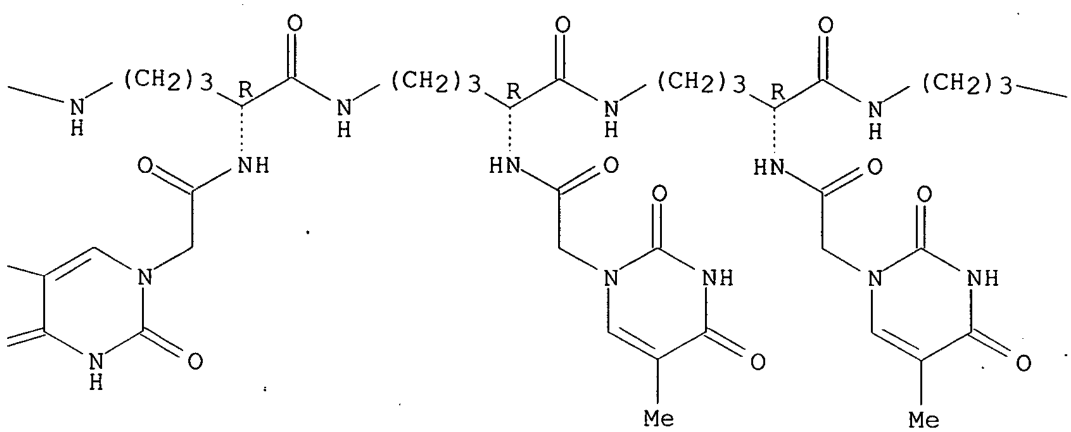
L2 ANSWER 33 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 175431-25-1 REGISTRY
CN D-Lysinamide, N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-(N5-D-ornithyl-D-ornithyl)-D-ornithyl]-D-ornithyl]-D-ornithyl]-D-ornithyl]-D-ornithyl]-D-ornithyl]-D-ornithyl]-D-ornithyl-, decaamide with 3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidineacetic acid (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C126 H175 N43 O41
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

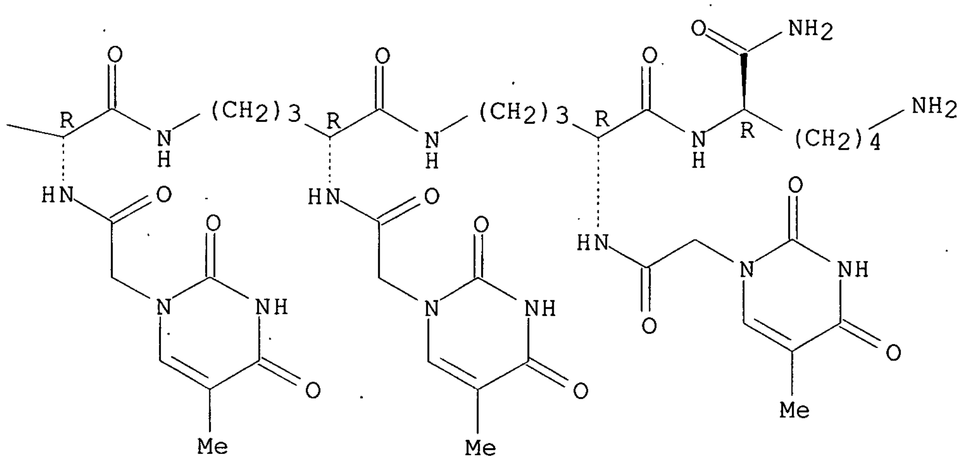
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 124:290226

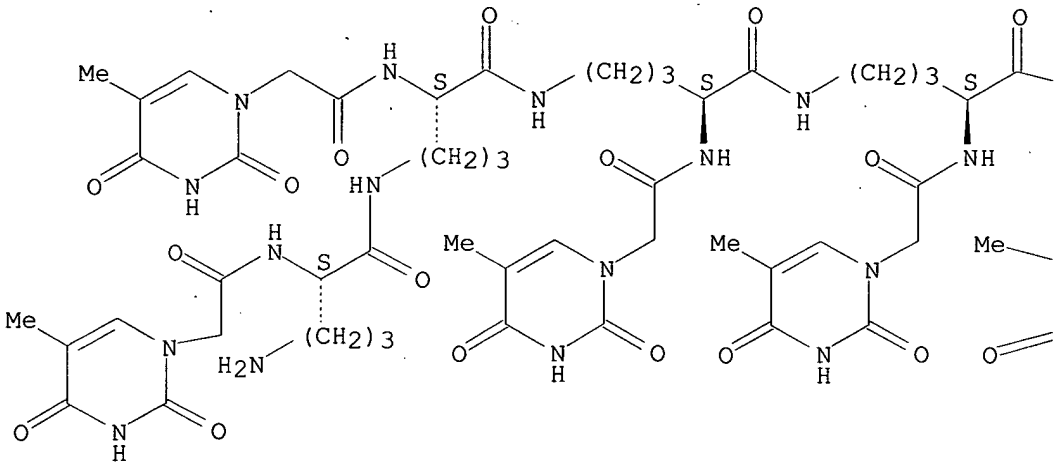
L2 ANSWER 34 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 175431-23-9 REGISTRY
CN L-Lysinamide, N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-

pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-(9CI) (CA INDEX NAME)

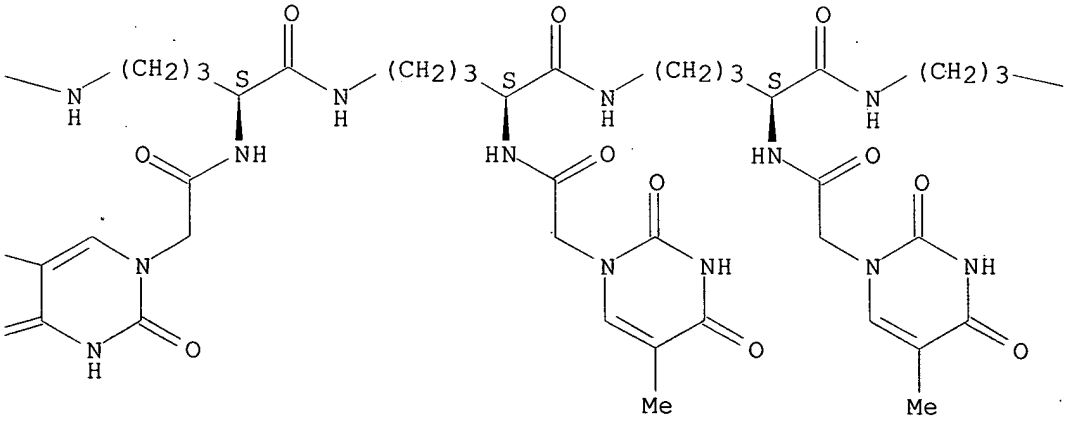
FS STEREOSEARCH
MF C126 H175 N43 O41
CI COM
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

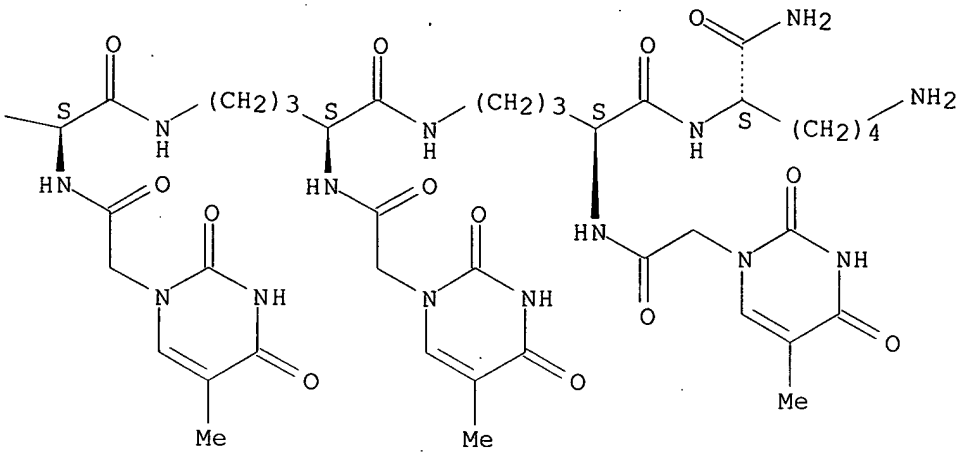
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

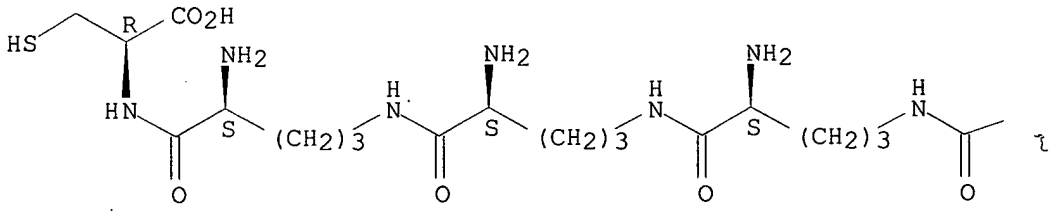
REFERENCE 1: 125:59113

REFERENCE 2: 124:290226

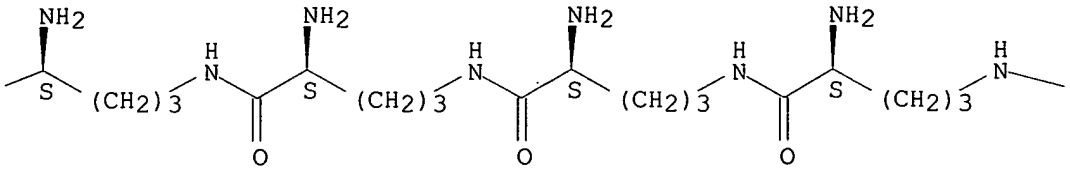
L2 ANSWER 35 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 171772-43-3 REGISTRY
CN L-Cysteine, N-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-(N5-L-cysteinyl-L-ornithyl)-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C56 H112 N22 O13 S2
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

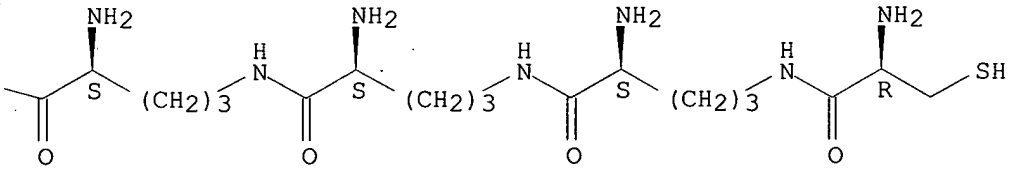
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

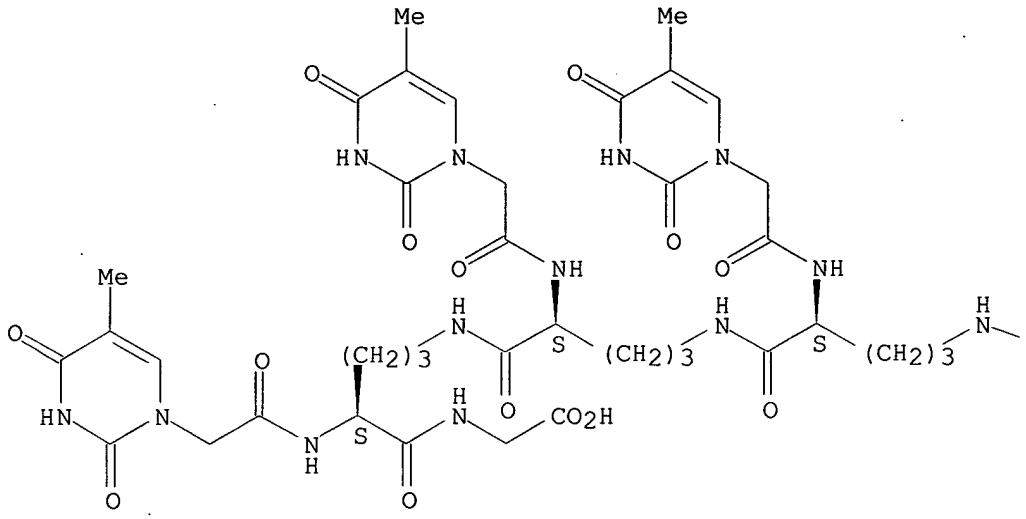
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 124:108909

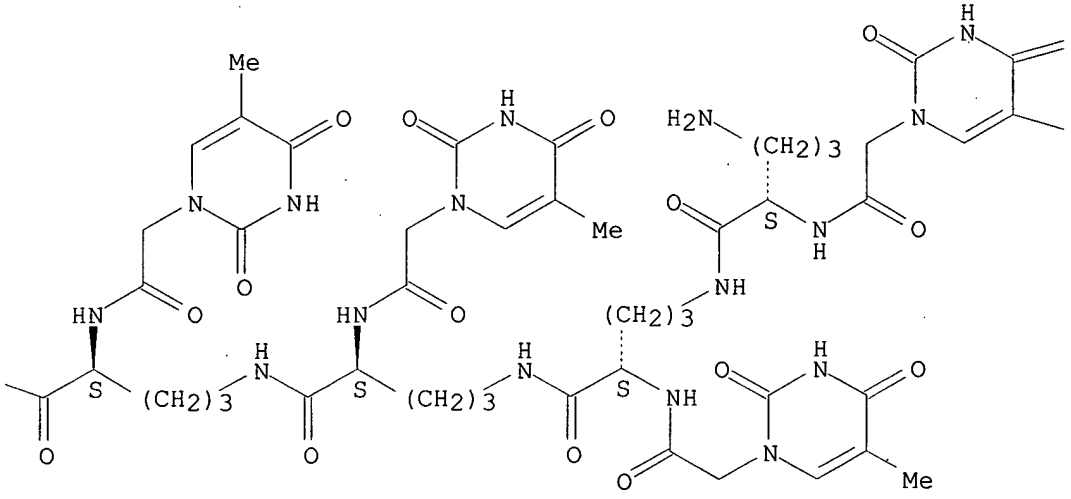
L2 ANSWER 36 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 168264-36-6 REGISTRY
CN Glycine, N-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C86 H117 N29 O30
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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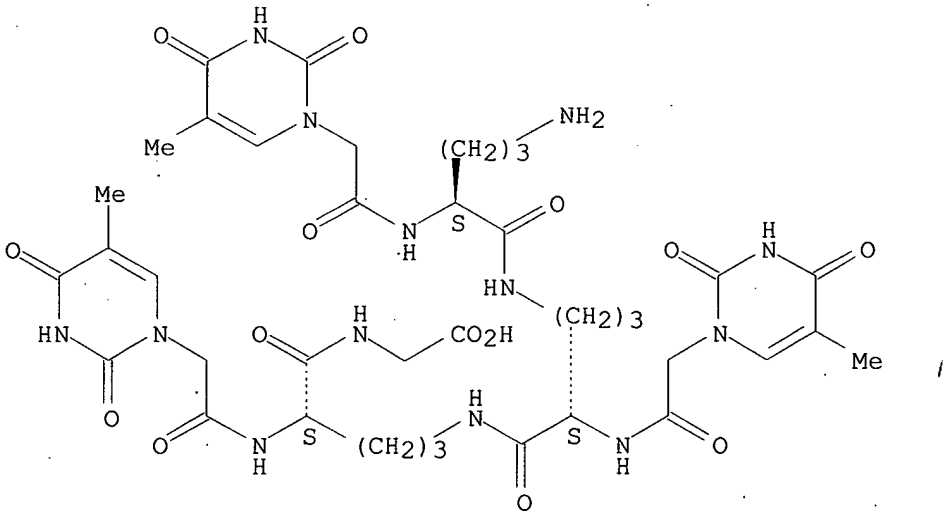
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 123:257406

L2 ANSWER 37 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 168264-35-5 REGISTRY
CN Glycine, N-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-N5-[N2-[(3,4-dihydro-5-methyl-2,4-dioxo-1(2H)-pyrimidinyl)acetyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C38 H53 N13 O14
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

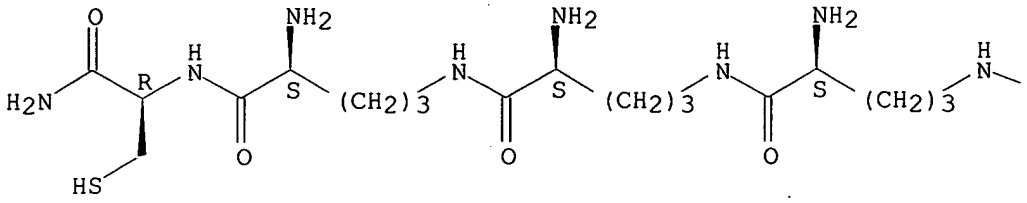
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 123:257406

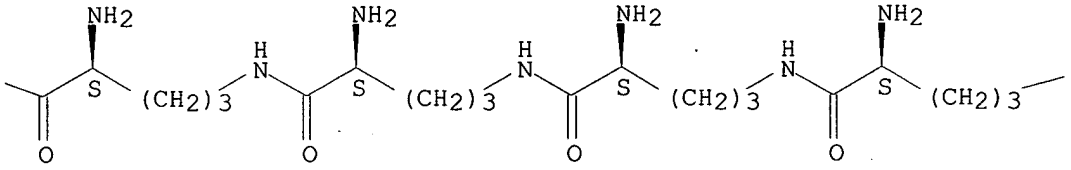
L2 ANSWER 38 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 160741-47-9 REGISTRY
CN L-Cysteinamide, N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-(N5-L-ornithyl-L-ornithyl)-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C63 H128 N26 O13 S
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

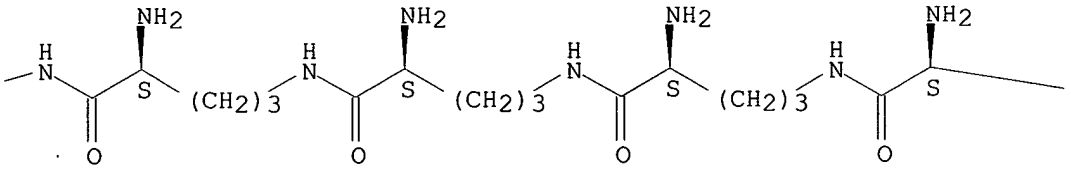
PAGE 1-A



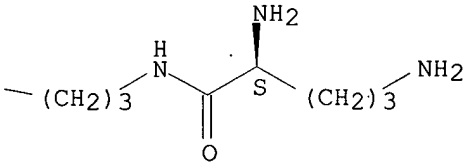
PAGE 1-B



PAGE 1-C



PAGE 1-D



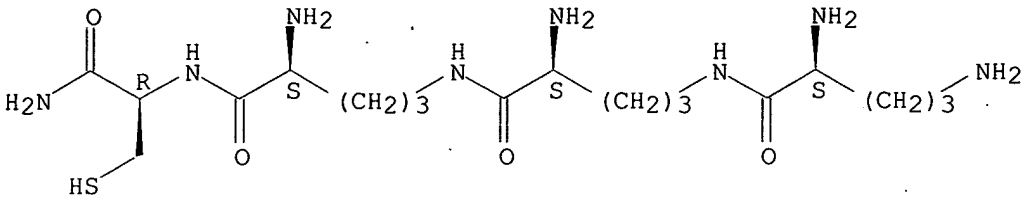
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 122:139492

L2 ANSWER 39 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 160741-46-8 REGISTRY
CN L-Cysteinamide, N5-(N5-L-ornithyl-L-ornithyl)-L-ornithyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C18 H38 N8 O4 S
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

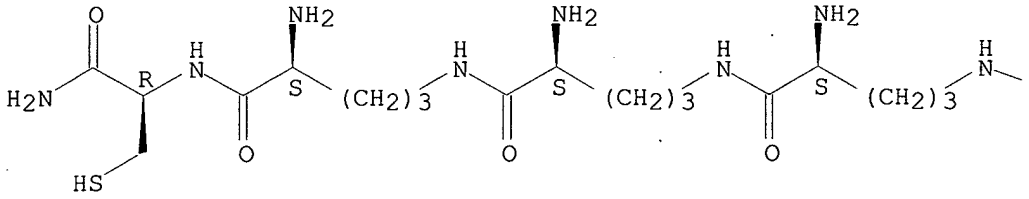
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 122:139492

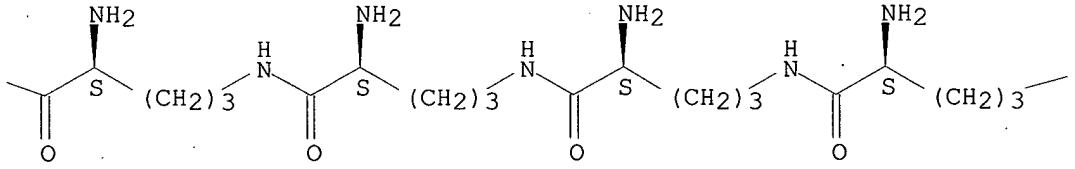
L2 ANSWER 40 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 160741-45-7 REGISTRY
CN L-Cysteinamide, N5-[N5-[N5-[N5-[N5-[N5-(N5-L-ornithyl-L-ornithyl)-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl-(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C43 H88 N18 O9 S
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

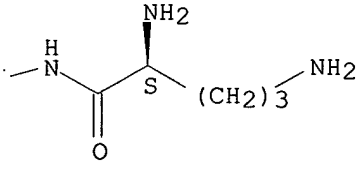
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

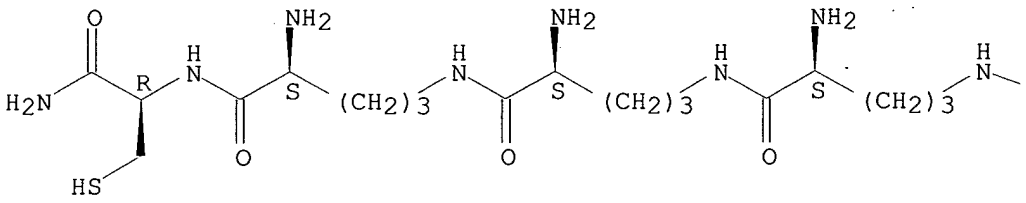
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 122:139492

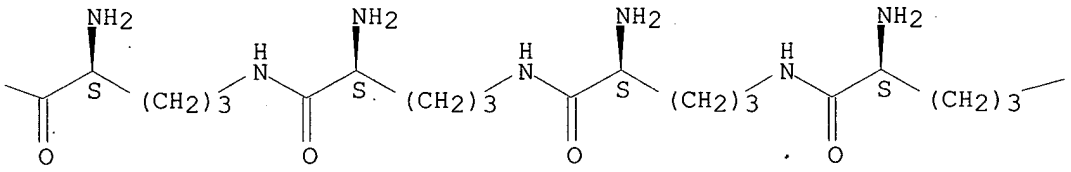
L2 ANSWER 41 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 160056-09-7 REGISTRY
CN L-Cysteinamide, N2-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[[3-hydroxy-5-(hydroxymethyl)-2-methyl-4-pyridinyl]methyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C71 H137 N27 O15 S
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

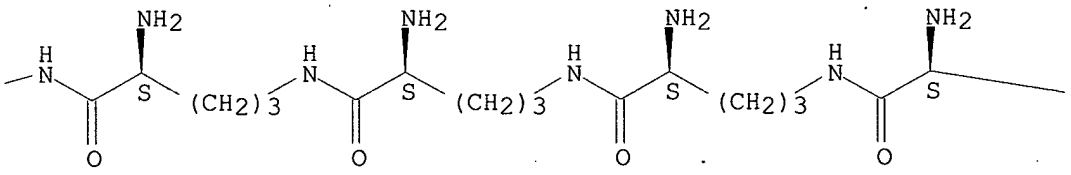
PAGE 1-A



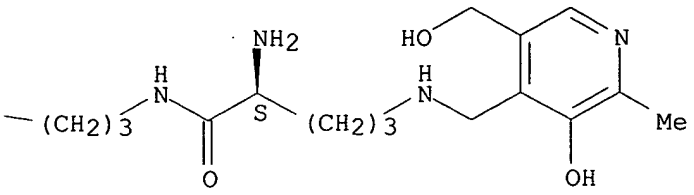
PAGE 1-B



PAGE 1-C



PAGE 1-D



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

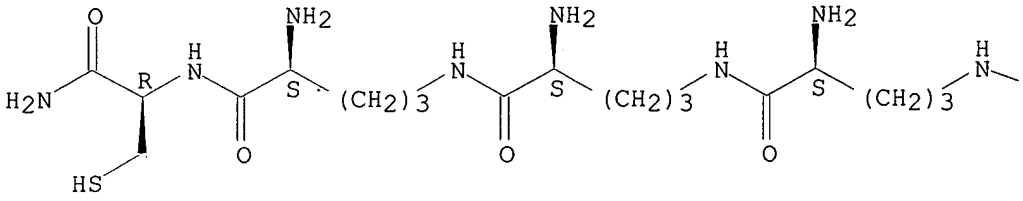
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 122:56488

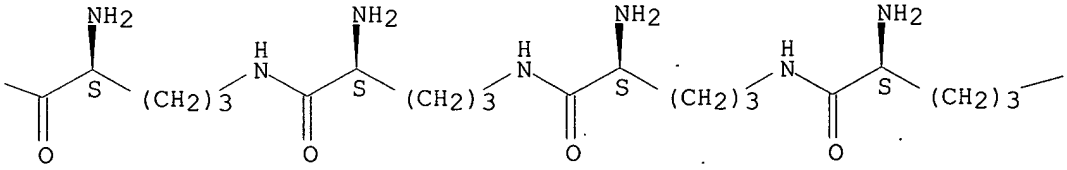
L2 ANSWER 42 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 160056-08-6 REGISTRY
CN L-Cysteinamide, N2-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[[3-hydroxy-5-(hydroxymethyl)-2-methyl-4-pyridinyl]methyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-(9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C51 H97 N19 O11 S
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

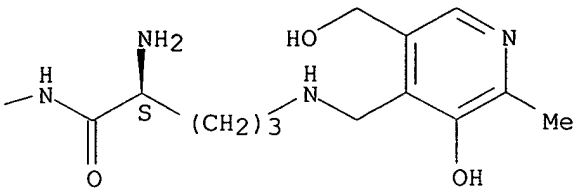
PAGE 1-A



PAGE 1-B



PAGE 1-C



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

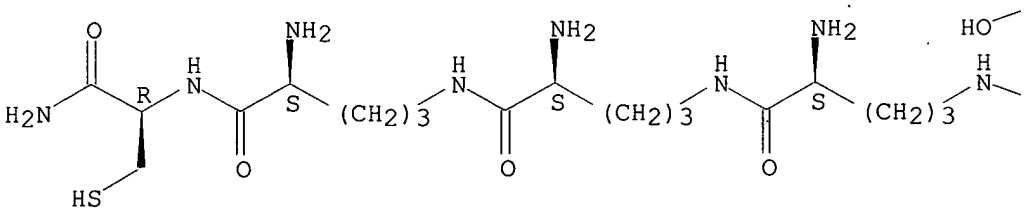
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 122:56488

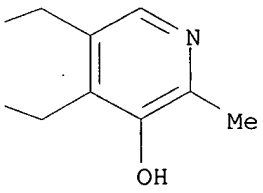
L2 ANSWER 43 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 160056-07-5 REGISTRY
CN L-Cysteinamide, N5-[N5-[N5-[[3-hydroxy-5-(hydroxymethyl)-2-methyl-4-pyridinyl]methyl]-L-ornithyl]-L-ornithyl]-L-ornithyl- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H47 N9 O6 S
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

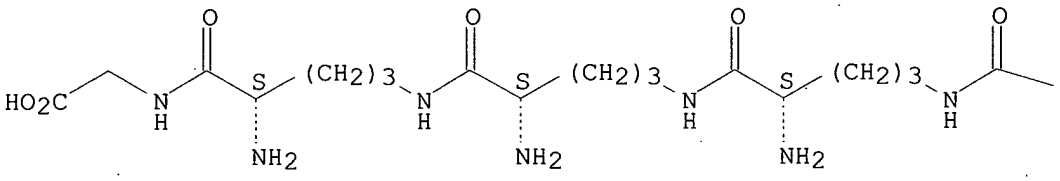
REFERENCE 1: 122:56488

L2 ANSWER 44 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 156311-81-8 REGISTRY

CN Glycine, N-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N5-[N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-cysteinyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
DR 172207-32-8
MF C75 H130 N24 O16 S
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PAGE 1-A



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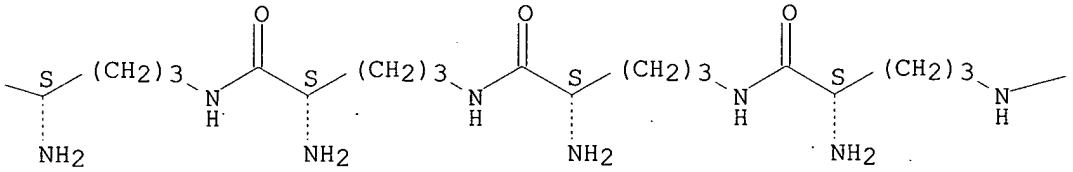

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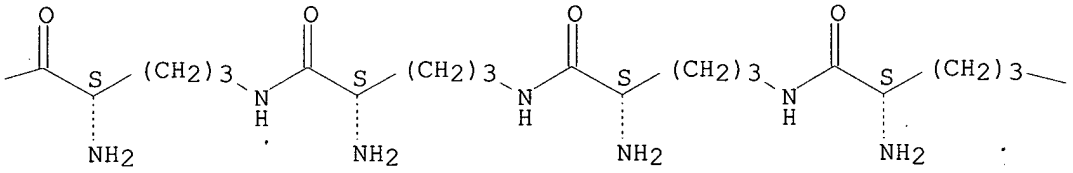

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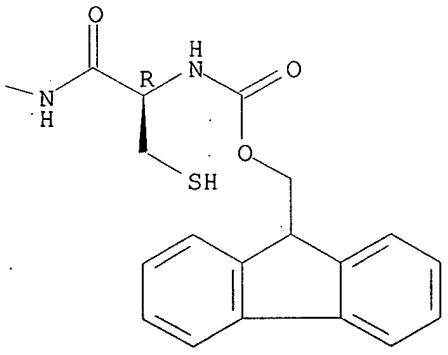


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

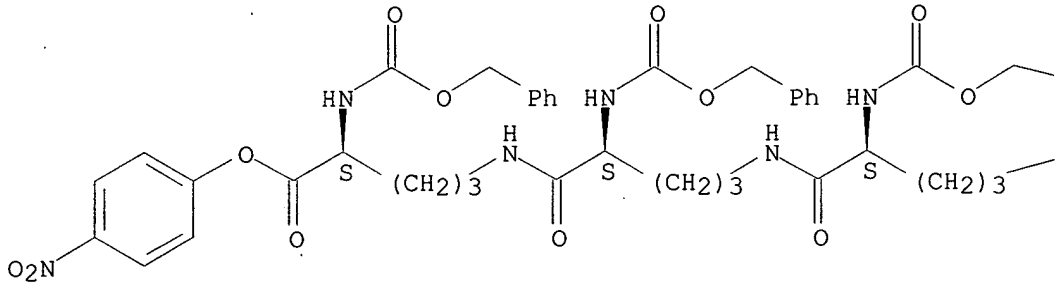
REFERENCE 1: 124:66581

REFERENCE 2: 121:180123

L2 ANSWER 45 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 125156-34-5 REGISTRY
CN L-Ornithine, N2-[(phenylmethoxy)carbonyl]-N5-[N2-[(phenylmethoxy)carbonyl]-N5-[N2-[(phenylmethoxy)carbonyl]-L-ornithyl]-L-ornithyl]-, 4-nitrophenyl ester, monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C45 H53 N7 O12 . Cl H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

PAGE 1-A



● HCl

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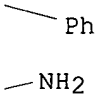

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 112:99263

L2 ANSWER 46 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 125156-33-4 REGISTRY
CN L-Ornithine, N5-[N5-[N5-[(1,1-dimethylethoxy)carbonyl]-N2-[(phenylmethoxy)carbonyl]-L-ornithyl]-N2-[(phenylmethoxy)carbonyl]-L-ornithyl]-N2-[(phenylmethoxy)carbonyl]-, 4-nitrophenyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH

MF C50 H61 N7 O14
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.

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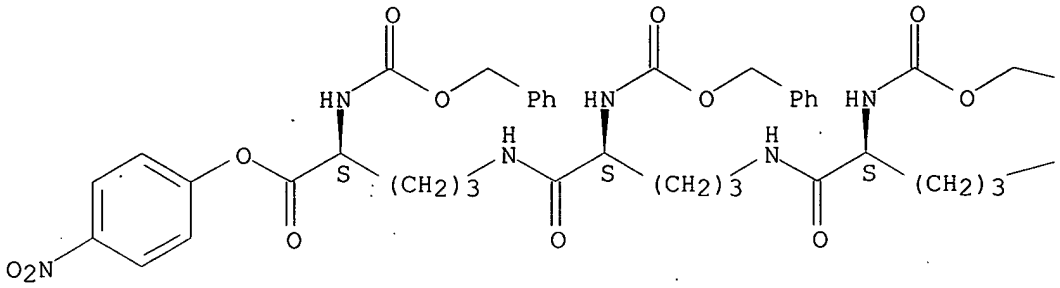

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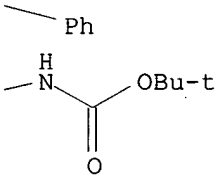
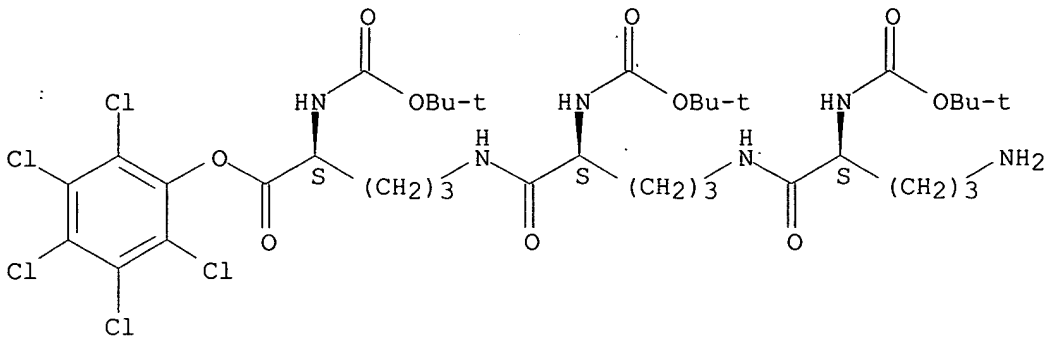


1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 112:99263

L2 ANSWER 47 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 78408-95-4 REGISTRY
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-L-ornithyl]-L-ornithyl]-, pentachlorophenyl ester, monohydrochloride (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C36 H55 Cl5 N6 O10 . Cl H
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



● HCl

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 95:62659

L2 ANSWER 48 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 78397-47-4 REGISTRY
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-[(phenylmethoxy)carbonyl]-L-ornithyl]-L-ornithyl]-, pentachlorophenyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C44 H61 Cl5 N6 O12
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

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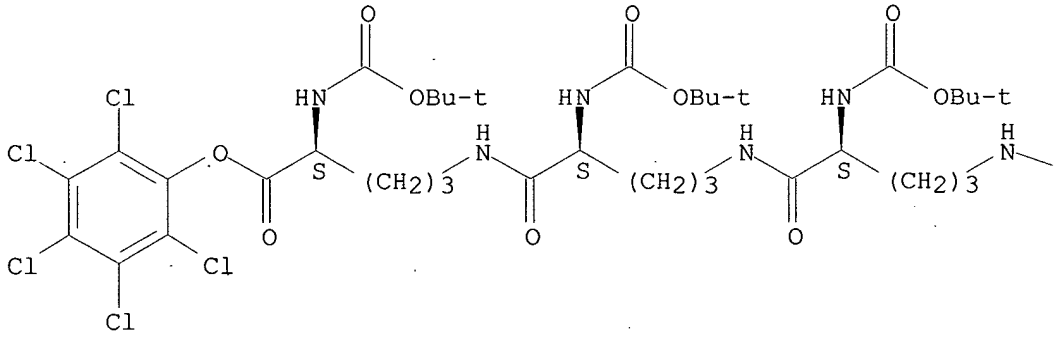

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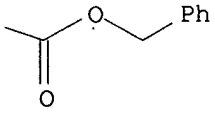

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 95:62659

L2 ANSWER 49 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 78397-46-3 REGISTRY
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-[(phenylmethoxy)carbonyl]-L-ornithyl]-L-ornithyl]-, compd. with N-cyclohexylcyclohexanamine (1:1) (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C38 H62 N6 O12 . C12 H23 N
LC STN Files: CA, CAPLUS

CM 1

CRN 78397-45-2
CMF C38 H62 N6 O12

Absolute stereochemistry.

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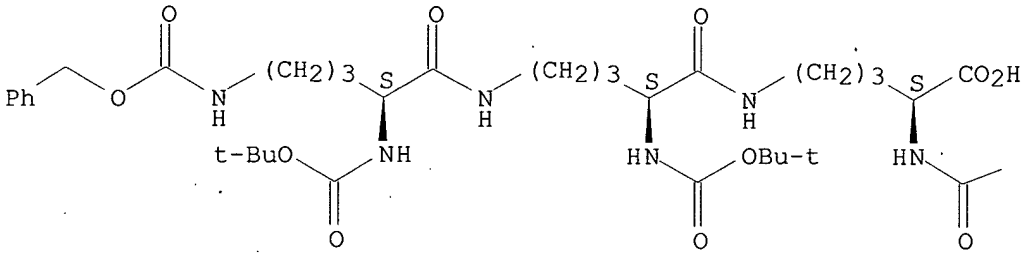

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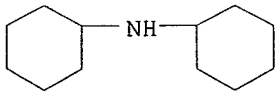
OBu-t

CM 2

CRN 101-83-7
CMF C12 H23 N



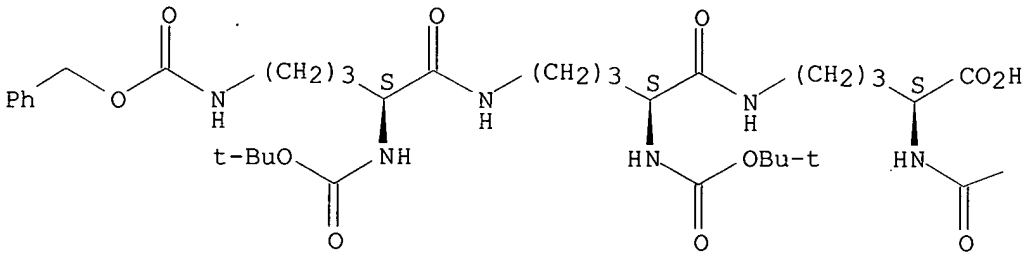
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 95:62659

L2 ANSWER 50 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 78397-45-2 REGISTRY
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-[(phenylmethoxy)carbonyl]-L-ornithyl]-L-ornithyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C38 H62 N6 O12
CI COM
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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OBu-t

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

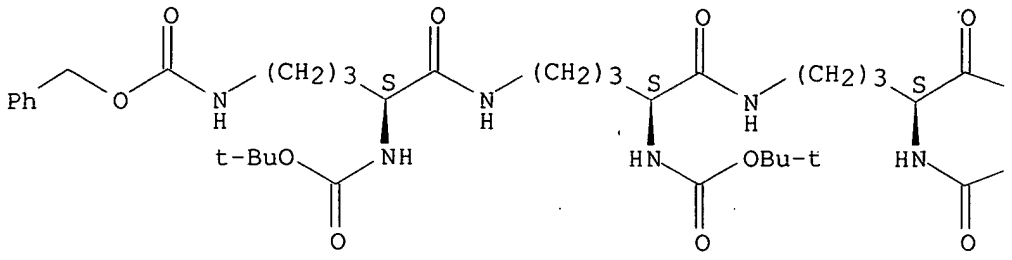
1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 95:62659

L2 ANSWER 51 OF 51 REGISTRY COPYRIGHT 2003 ACS
RN 78397-44-1 REGISTRY
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-[(phenylmethoxy)carbonyl]-L-ornithyl]-L-ornithyl]-, methyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C39 H64 N6 O12
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



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OBu-t

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

REFERENCE 1: 95:62659